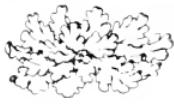




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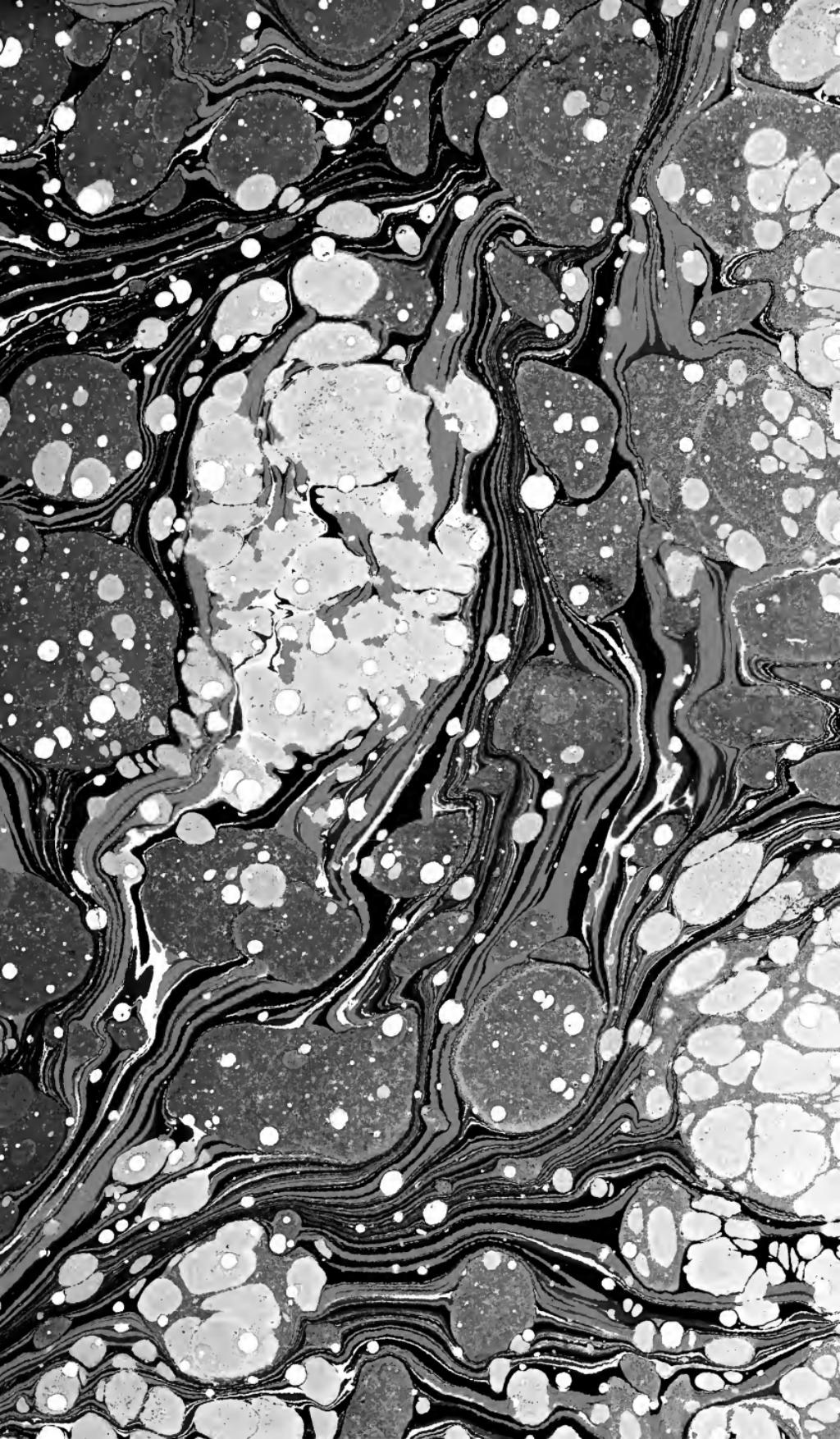
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# Grevillea,

A QUARTERLY RECORD OF  
CRYPTOGAMIC BOTANY  
AND ITS LITERATURE.

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EDITED BY M. C. COOKE, M.A., A.L.S.,

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"Rust, Smut, Mildew, and Mould," &c., &c.*

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## NEW BRITISH FUNGI.

By M. C. COOKE.

(Continued from Vol. XIII., p. 100.)

### **Agaricus (Hypholoma) oedipus, Cooke.**

Pileus glutinous, fleshy in the centre, membranaceous at the margin, at first turbinate or hemispherical, with a ragged margin (which separates from the inferior, very visible, and slightly darker evanescent ring), then convex, with an even margin, smooth, dull, hygrophanous, disc umber, becoming pallid at the margin, which extends slightly beyond the gills. Stem rather thick, enlarging downwards to a bulbous base, solid, fibrillose below, pruinose above the median ring. Gills at first whitish, becoming umber, adnate by their entire breadth, sometimes with a minute decurrent tooth, plane, with a somewhat granular margin. Spores dark brown.—*Cooke Illus. ined.*

Attached to decayed sticks or dead leaves. Clehanger, Feb., 1872. (*J. Renny & Dr. Bull.*)

At present the only British representative of the "Viscid" section of *Hypholoma*. Pileus  $\frac{1}{2}$  to 1 inch diam. Stem 2 inches long, 2-3 lines thick, nearly white.

### **Agaricus (Hypholoma) canofaciens, Cooke.**

Gregarious. Pileus campanulate, then expanded, scarcely umbo-nate, but with a fleshy disc, even, dark bay brown, ferruginous at the apex, clad everywhere, as well as the stem, with delicate scattered white hairs, which are soon evanescent at the apex ; veil white, fibrillose, at first attached to the margin of the pileus. Stem of the same colour as the pileus, nearly equal, stuffed, very dark at the base ; flesh of the pileus pallid, of the stem rufescent, gradually darker downwards. Gills very broad, adnate, ventricose, dark umber.—*Cooke Illus. ined.* Ag. areolatus., *Smith, in Mus. Britt.*

On rotten straw. Stoke Newington, May 1876. (*W. G. Smith.*)

Pileus about  $1\frac{1}{2}$  inch diam. Stem 3 inch long, 3-4 lines thick. Spores elliptical, irregular in size  $0.012\text{-}0.017 \times 0.008$  mm.

***Æcidium Convallariæ*, Schum. Saell. II., 22.**

Hypophylloous. Spots greenish yellow, cups crowded in orbicular clusters, mostly concentrically disposed, pale yellow, cup-shaped, somewhat immersed; mouth toothed, at length entire. Spores pale yellow.

On lily of the valley. Bowness Lake, Windermere, June, 1884. (*T. Hebden*.)

***Æcidium Pimpinellæ*, Kirch. var. *Apii*.**

On leaves and petioles of wild celery, *Apium graveolens*, near Hull. (*T. Dennis*.)

***Phoma Loti*, Cooke.**

Gregarious. Perithecia globose, black, covered by the elevated cuticle, which is soon pierced by the prominent ostiola. Sporules elliptical, hyaline, enucleate ( $\cdot 005 \times \cdot 002$  mm.), without apparent, or very short, sporophores.

On small twigs of *Diospyros lotus*. Kew.

***Phoma viventis*, Cooke.**

Gregarious. Perithecia punctiform or slightly elongated, minute, black, covered by the shining discoloured cuticle, which is at length cracked longitudinally. Sporules subfusiform, obtuse at the ends, enucleate, hyaline ( $\cdot 006\text{--}007 \times \cdot 0025$  mm.).

On living twigs of *Lonicera*. Kew.

***Phoma staphyleæ*, Cooke.**

Gregarious. Perithecia punctiform, covered by the cuticle, which is at length blackened, rather prominent, seldom exposed. Sporules elliptical, continuous, enucleate ( $\cdot 005\text{--}008 \times \cdot 003\text{--}004$  mm.), with no distinct sporophores.

On thin twigs of *Staphylea pennata*, *S. trifoliata*, and *S. colchici*. Kew.

***Phoma opulifoliae*, Cooke.**

Gregarious. Perithecia punctiform, depressedly globose, covered by the discoloured cuticle, which is slightly elevated. Sporules narrowly lanceolate, continuous, binucleate ( $\cdot 01 \times \cdot 0025$  mm.), shortly stipitate.

On twigs of *Spiraea opulifolia*. Pleasure grounds, Kew.

It differs from British specimens of *P. sorbariae* on the same plant in not being deeply immersed in the bark, in the perithecia being smaller, and in the sporules being longer and narrower.

***Phoma jasmini*, Cooke.**

Perithecia scattered, covered by the cuticle, prominent, black, subglobose, much larger than in *Phoma domestica*, and more prominent. Sporules subfusiform, binucleate ( $\cdot 009\text{--}01 \times \cdot 003$  mm.), on short sporophores.

On *Jasminum officinale*. Kew.

Sometimes associated with *P. domestica*.

***Phoma crassipes*, Cooke.**

Erumpent, somewhat scattered. Perithecia rather large, black, opaque, subglobose, at length with the upper half exposed. Sporules oval, continuous, hyaline, without nuclei ( $\cdot 006 \times \cdot 004$

mm.), on thick sporophores, which are three times as long as the sporules and about half their diameter.

On small twigs of *Broussonetia papyrifera*. Kew.

**Phoma rhodoræ, Cooke.**

Spots apical or marginal, large, irregular, brown. Perithecia gregarious, minute, punctiform, black, immersed, scarcely visible to the naked eye. Sporules numerous, very minute, subelliptical, hyaline ( $\cdot004\text{--}\cdot005 \times \cdot002$  mm.), on short sporophores.

On living leaves of *Rhododendron*. Kew.

Perhaps the spermogonia of *Sph. (Læstadia) rhodoræ*.

**Phoma polygonorum, Cooke.**

Loosely gregarious. Perithecia minute, punctiform, covered by the cuticle, which is soon pierced by the minute ostiola. Sporules narrowly elliptical, continuous, hyaline, without distinct nuclei ( $\cdot012 \times \cdot003$  mm.).

On stems of *Polygonum cuspidatum*. Kew.

**Phoma cistica, Cooke.**

Densely gregarious, subcutaneous, elevating and sometimes throwing off the outer layer of the bark. Perithecia subglobose, black, collapsed when dry; ostiolum sometimes short, and just piercing the cuticle, sometimes 2 or 3 times as long as the diameter of the perithecia, and flexuous. Sporules subcylindrical or fusoid, obtuse at the end, usually with two small nuclei, hyaline ( $\cdot006\text{--}\cdot007 \times \cdot0025$  mm.). Sporophores about twice as long as the sporules.

On branches of *Cistus laurifolius*. Kew.

There is a circumscribing black line in the wood where the perithecia are adnate, or partially immersed, but in these instances all the perithecia were exolete. Little doubt can exist of these being really a *Diaporthe*, but no ascigerous fruit has yet been seen.

**Phoma Barbari, Cooke.**

Perithecia loosely gregarious, covered by the epidermis, convex, not erumpent, at length pierced. Sporules oval, binucleate, hyaline ( $\cdot005 \times \cdot003$  mm.)

On branches of *Lycium barbarum*. Kew.

**Phoma celtidis, Cooke.**

Perithecia prominent, convex, loosely gregarious, covered by the cuticle, piercing it with its black punctiform ostiolum. Sporules oval, without nuclei, hyaline ( $\cdot005 \times \cdot0035$  mm.).

On slender twigs of *Celtis occidentalis*.

There is another *Phoma*, on thicker branches, which we have met with, once or twice, with fusiform binucleate sporules ( $\cdot01 \times \cdot003$ ), but we have not sufficient material to warrant a description.

**Phoma rubella, Cooke.**

Perithecia collected on indeterminate red spots, semi-immersed, somewhat depressed, black, scarcely papillate. Sporules narrowly elliptical, without nuclei, continuous, hyaline ( $\cdot007 \times \cdot002$  mm.).

On dead stems of *Umbelliferæ*. Kew.

**Phoma aromatica, Cooke.**

Perithecia gregarious, covered by the slightly convex cuticle, depressed, rather minute, scarcely papillate. Sporules sublanceolate, continuous, with two nuclei, hyaline ( $\cdot 008\text{--}\cdot 01 \times \cdot 003\text{--}\cdot 0035$  mm.) on short sporophores.

On twigs of *Calycunthus occidentalis*. Kew.

This is clearly not the *Phoma calycanthei*, Schw.

**Phoma Elaeagnella, Cooke.**

Scattered or subgregarious, minute, covered by the convex cuticle. Perithecia depressedly globose, black. Sporules oval, profuse, continuous, hyaline, without nuclei ( $\cdot 005 \times \cdot 0025$  mm.), without distinct sporophores.

On branches of *Elaeagnus*. Kew.

**Cytispora Staphyleæ, Cooke.**

Stroma flattened, with two or three cells, covered by the slightly raised epidermis, which opens by a small elevated white-margined pore. Sporules linear, curved, obtuse (allantoid) hyaline ( $\cdot 006 \times \cdot 001$  mm.).

On branches of *Staphylea pennata* and *S. trifoliata*. Pleasure grounds, Kew.

**Cytispora Jasmini, Cooke.**

Stroma rather conical, subcutaneous, small, covered by the darkened cuticle, very loosely gregarious. Sporules linear, curved, obtuse (allantoid),  $\cdot 006 \times \cdot 001$  mm. Oozing from a small orifice in the cuticle.

On thin twigs of *Jasminum officinale*. Pleasure grounds, Kew.

**Cytispora Euonymi, Cooke.**

Gregarious, pseudo-perithecia conical, covered by the darkened cuticle, rather small, at length blackish and shining. Sporules allantoid, curved, hyaline ( $\cdot 008 \times \cdot 002$  mm.), issuing in pallid tendrils.

On small twigs of *Euonymus americanus*. Kew.

**Cryptosporium Hippocastani, Cke.**

Stroma cortical, covered, splitting the bark, and confluent longitudinally, pallid, conidia oblong fusiform, continuous, without nuclei, rather obtuse ( $\cdot 018\text{--}\cdot 02 \times \cdot 005$ ). Oozing out and forming a whitish farinaceous margin to the fissures. Sporophores simple, or forked, twice as long as the conidia.

On branches of *Aesculus hippocastanum*. Kew.

Closely allied to *C. coronatum*, Fckl.

**Sphaeropsis Betulae, Cooke.**

Sub-gregarious, sometimes scattered, concealed beneath the elevated cuticle. Perithecia depressedly globose, scarcely papillate. Sporules elliptical, rounded at the ends, continuous, yellowish ( $\cdot 03\text{--}\cdot 032 \times \cdot 009$  mm.).

On twigs of *Betula alba*. Kew.

**Diplodia cistina, Cooke.**

Gregarious, deeply seated, covered and concealed by the bark. Perithecia rather conical, black, often in lines, or small clusters,

only seen when the outer layers of the bark are peeled off. Sporules elliptical, uniseptate, not constricted, brown ( $\cdot 016\cdot 022 \times \cdot 009\cdot 01$  mm.).

On stems and branches of *Cistus laurifolius*. Pleasure grounds, Kew.

**Hendersonia Tamaricis, Cooke.**

Perithecia loosely gregarious, covered by the elevated cuticle, subglobose, scarcely papillate. Sporules elliptical, slightly attenuated at each extremity, triseptate, not constricted, clear brown ( $\cdot 018\cdot 02 \times \cdot 007$  mm.).

On branches of *Tamarix gallica*. Kew.

**var. Elæagni, Cooke.**

Perithecia rather smaller, and more closely gregarious. Sporules the same.

On branches of *Elæagnus*. Kew.

This form differs so little from that on *Tamarix*, that it can have no claim to be considered a distinct species.

**Hendersonia ambiens, Cooke.**

Gregarious, covered by the elevated cuticle, which is at length perforated, globose, shortly papillate. Sporules narrowly elliptical, triseptate, not constricted, clear brown ( $\cdot 02 \times \cdot 007\cdot 008$  mm.). At first with sporophores of equal length.

On branches of *Acer dasycarpum*. Kew.

**Camarosporium Staphyleæ, Cooke.**

Scattered, covered by the bark, and concealed. Perithecia black, globoso-depressed, rarely slightly elevating the cuticle. Sporules elliptical, triseptate, one or other of the central cells transversely divided, not constricted, clear brown ( $\cdot 018\cdot 02 \times \cdot 008$  mm.).

On branches of *Staphylea pennata* and *S. trifoliata*. Kew.

What appears to be a variety of the same species occurs on slender twigs of *Celtis*.

**Camarosporium cistinum, Cooke.**

Gregarious, seated on the inner bark. Perithecia globose, black, with a conical ostiolum, which perforates the covering layer of bark, sometimes forming irregular lines. Sporules elliptical, elongated, triseptate, not constricted at the septum, with sometimes (but not constantly) one of the central cells divided longitudinally, brown ( $\cdot 015\cdot 018 \times \cdot 005\cdot 007$  mm.).

On branches of *Cistus laurifolius*. Kew.

**Coryneum cistinum, Cooke.**

Stroma pulvinate, orbicular, convex, black, seated in the inner bark, somewhat gregarious, covered and wholly concealed by the outer bark, and only exposed when this falls away; conidia lanccolate, obtuse at the ends, triseptate, but not constricted, clear brown ( $\cdot 05\cdot 055 \times \cdot 015\cdot 018$  mm.); pedicels hyaline, about the same length as the conidia, at length deciduous.

On branches of *Cistus laurifolius*. Kew.

MILOWIA. *Massee.*

Pulvinate, monoecious. Mycelium sparsely septate, branched, flexuous, giving origin to numerous lateral fertile three-celled branches. Pollinodium clavate, springing from the basal cell of the fertile branch. Carpogonium formed from the terminal cell of the fertile branch, broadly obovate, producing from near its apex from two to five cylindrical octosporous asci.

**Milowia nivea**, *Massee*, in *Roy. Micr. Journ.* 1884, p. 841, pl. XII.

Tufts globose, minute, white; sporidia colourless, cylindrical, truncate; conidia globose, moniliform, occupying the same position as the carpogonium when the latter is not developed.

Forming snow-white spots on decaying leaves of *Blysmus compressus*.

(The question which suggests itself in connection with this fungus is, as to the nature of the naked clavate bodies termed asci, viz., whether they are merely more completely developed hyphae with dissilient joints, as in *Sporochisma*, or asci, as in *Ascomyces*, —Ed.)

**Rhinotrichum decipiens**, *Cooke*.

Broadly effused, resembling some species of *Corticium*, at first of a pale rose-pink colour, growing pallid when old, somewhat velvety, with a thin radiating margin, often separable from the matrix. Sterile threads creeping, branched, septate, densely interwoven; fertile branches rather short, more closely septate, erect, clavate, the ultimate one or two joints covered with short acute spicules. Spores ovate, attached by the small extremity to the spicules, ·022-·025 × ·014-·015 mm.

Overrunning bark and mosses. Carlisle, Feb., 1884. (Dr. Carlyle.)

It becomes quite firm and like a *Corticium* when dry. Easily mistaken for *Peniophora velutina*.

**Peziza (Tarzetta) petaloidea**, *Cke. & Phil.*

Stem rooting, attenuated downwards, cups lobate, expanded\* and flattened, externally verrucose, fuliginous-brown, disc yellowish-brown, rugose ( $\frac{1}{2}$ - $\frac{3}{4}$  inch diam.). Asci cylindrical. Sporidia eight, elliptical (·015- $\times$  ·008 mm.), rough; paraphyses linear. *Peziza cupularis*, var. in *Herb. Berk.*

On the ground. East Bergholt, Feb., 1852.

A most distinct species, probably an inch in diameter when living. The above description taken from the dried specimens.

**Patellaria subtectum**, *Cke & Phil.*

Singly or in clusters, appearing first as black conical points emerging through the layers of bark, in which condition no fructification is seen; at length the conical points expand into lens-shaped, or Lecidea-like discs, which are immarginate and black, about 1 mm. broad or less, substance soft and fragile. Asci broadly clavate, narrowed into a slender stem. Sporidia 8, oblongo-elliptical, with 3-4 nuclei, at length 1-3 septate (·02-·024 × ·005-·006

mm.); paraphyses filiform, slender. Stylospores in the same hymenium, elongated, cylindrical, with 5-8 nuclei, curved, on short sporophores seated amongst the asci ( $0.03-0.05 \times 0.005$  mm.).

On inner bark of *Cistus laurifolius*. Kew.

**Valsa (Cryptospora), Betulae, Tul. Sacc. Syll. 4124.**

Pustules orbicular, immersed; perithecia 8-10, circinating, globose; disc scarcely emergent, conical, ostiola punctiform, rather prominent. Asci cylindrical-clavate, attenuated below. Sporidia linear, obtuse at the ends, arcuate, continuous, hyaline ( $0.035-0.038 \times 0.0035-0.005$  mm.).

On branches of *Betula*. Kew pleasure grounds. Near Bristol. (C. Bucknall). Sphaeriacei Brittanici. (Plowright.)

Although found in Britain for some years, the description appears to have been omitted.

**Valsa (Chorostate) Robergeana, Desm. Sacc. Syll. 2388.**

Corticulous, immersed, minute. Perithecia 6-15, covered by the adnate epidermis, crowded in an irregular circle, black, at first globose, then collapsing and concave. Ostiola convergent, cylindrical, erumpent. Asci somewhat fusiform, sporidia eight, biserrate, somewhat elliptical, uniseptate or biguttulate, hyaline ( $0.015 \times 0.005$  mm.).

On *Staphylea pinnata*. Pleasure grounds, Kew.

What appears to be another species has been met with but once, with fusiform, acute, narrow, quadri-nucleate sporidia, about  $0.014 \times 0.003$  mm., which can hardly be any form of the present.

**Diaporthe viridarii, Sacc. Syll. 2568.**

Stroma broadly effused, immersed in the bark or wood of the branches, circumscribed by a flexuous line. Perithecia rather large, globose, then depressed; neck very short; ostiola rather thick and obtuse. Asci somewhat fusiform. Sporidia ovate-fusiform ( $0.015-0.016 \times 0.005$  mm.), uniseptate, constricted, obtuse at the ends, with 4 nuclei, hyaline.

On slender twigs of *Prunus lauro-cerasus*. Kew.

**Sphaeria (Didymella) sphingiophora, Oudem. Diaporthe sphingiophora, Sacc. Syll. 2414.**

Perithecia scattered, nestling beneath the epidermis, at length erumpent, furnished with a short neck perforated with a round pore. Asci oblong, with eight spores. Sporidia biserrate, oblong, obtuse at the ends, straight or slightly curved, uniseptate, hyaline ( $0.017 \times 0.005$  mm.).

On small twigs of *Cornus alba*. Kew.

This species and *Sphaeria salicella*, Fr., cannot with any reason be included in *Valsa* or *Diaporthe*.

**Hypocrea dacrymycella Cke & Pl. Grev. xii. 100.**

By some error this species was described again by Mr. Plowright (Grev. xiii. p. 79), under the name of *Hypocrea viscidula*.

## CALIFORNIAN FUNGI.

BY M. C. COOKE AND W. H. HARKNESS.

(Continued from Vol. XIII., p. 114.)

**Diplodia lupini, Che. & Hark.**

Caulicola. Peritheciis sparsis, tectis, depresso-globosis, vix papillatis. Sporulis ellipticis, uniseptatis, nec constrictis, fuscis, ( $026\cdot028 \times \cdot01$  mm.).

On stems of *Lupinus*. (Harkness, 2247.)

In company with *Diaporthe lupini*, Hark.

**Uromyces punctato-striatum, Che. & Hark.**

Acervulis bullatis, difformibus.

*Uredospores*. Sporis globosis, laevibus, castaneo-fuscis ( $\cdot025$  mm. diam.).

*Teleutospores*. Sporis oblongis, utrinque acuminatis, pallide fuscis. Episporio tenui longitudinaliter punctato, striato, striis reticulato-anastomosantibus ( $\cdot04 \times \cdot02$  mm.).

On twigs of *Rhus*. (Harkness, 2479.)

**Dothidea (Plowrightia) calystegiae, Che. & Hk.**

Subgregaria, stromatibus ellipticis, erumpentibus, atris, opacis ( $1\cdot2 \times \frac{1}{2}$  mm.), cellulis immersis, epidermide ruptâ cinctis. Ascis clavatis, octosporis vel tetrasporis. Sporidiis elongato-ellipticis, inordinatis, uniseptatis, nec constrictis, hyalinis ( $\cdot022 \times \cdot007$  mm.). Conidiis ovalibus, continuis ( $\cdot005 \times \cdot003$  mm.), pallidis consociatis.

On stems of *Calystegia sepium*. (Harkness, 2477.)

**Valsa lupini, Che. & Hk.**

Acervulis gregariis, erumpentibus. Peritheciis (4-8) subglobosis, atris, in cæspitulis subconicis congestis, ostiolis convergentibus, minutis. Ascis clavatis, deorsum longe attenuatis, octosporis. Sporidiis allantoideis, subrectis, hyalinis ( $\cdot007 \times \cdot002$  mm.).

On stems of *Lupinus*. (Harkness, 1990.)

**Valsa lavateræ, Che. & Hk.**

Acervulis gregariis, in ligno nigrificato immersis, epidermide tectis. Peritheciis (3-6) subglobosis, atris, ostiolis elongatis, cylindraceis, tenuibus, emergentibus. Ascis clavatis, octosporis. Sporidiis allantoideis, hyalinis ( $\cdot008 \times \cdot002$  mm.).

On stems of *Lavatera assurgentifolia*. (Harkness, 2361.)

**Diaporthe geranii, Che. & Hk.**

Peritheciis gregariis, in cortice immersis, saepe nigro-limitatis, subglobosis, atris, initio tectis, dein rimoso fissuratis, ostiolis brevibus, emergentibus. Ascis clavatis. Sporidiis lanceolatis, quadrinucleatis, hyalinis ( $\cdot015\cdot016 \times \cdot004$  mm.).

On stems of *Geranium*. (Harkness, 2429.)

**Diaporthe elephantina, Che. & Hk.**

Pustulis valsæformibus, rarissime dispersis. Peritheciis in cortice immersis vel ligno adnatis, globosis, atris, ostiolis tenuis, elongatis, flexuosis, cylindraceis, emergentibus. Ascis clavatis, octosporis.

Sporidiis lanceolatis, quadrinucleatis mox uniseptatis, hyalinis ( $\cdot 012 \times \cdot 0035$  mm.).

On stems of *Geranium*. (Harkness, 2499, 2130.)

**Diaporthe immutabilis**, Cke. & Hk.

Stromate varie effuso interruptoque, caulis superficiem vix decolorato, linea nigra infra, in ligno, limitato; peritheciis sparsis globosis, ostiolis brevibus punctiformibus. Ascis clavatis, octosporis. Sporidiis sublanceolatis, biserialibus, rectis curvulivse 2-4 nucleatis, uniseptatis, hyalinis ( $\cdot 012\text{--}014 \times \cdot 004$  mm.).

On stems of *Scrophularia*. (Harkness, 2463.)

**Physalospora geranii**, Cke. & Hark.

Peritheciis densissime gregariis, convexis, atris, epidermide velatis, demum erumpentibus. Ascis clavatis, amplis, octosporis. Sporidiis ellipticis, biserialibus, continuis, intus granulosis, hyalinis ( $\cdot 025\text{--}028 \times \cdot 01$  mm.).

On stems of *Geranium*. (Harkness, 2129.)

**Sphærella (Læstadia) caryophyllea**, Cke. & Hk.

Peritheciis minutis, punctiformibus, densissime gregariis, aterris, convexis, emergentibus. Ascis obclavatis, octosporis. Sporidiis obtuse lanceolatis, biserialibus, continuis, hyalinis ( $\cdot 02 \times \cdot 0075$  mm.).

On stems of *Dianthus*. (Harkness, 2183.)

**Sphærella xanthicola**, Cke. & Hark.

Peritheciis punctiformibus, prominulis, atris, in maculas ellipticis congestis, initio epidermide tenui velatis. Ascis obclavatis, sessilibus, octosporis. Sporidiis ellipticis, uniseptatis, vix constrictis, utrinque rotundatis, hyalinis ( $012\text{--}015 \times \cdot 005\text{--}006$  mm.).

On stems of *Xanthium*. (Harkness, 2451.)

**Didymella megarrhizæ**, Cke. & Hk.

Gregaria. Peritheciis subconicis, atris, parvulis, nitidis, initio velatis, demum ostiolo acuto erumpentibus. Ascis cylindrico-clavatis, octosporis, sporidiis ellipticis, uniseptatis, medio constrictis, rectis, hyalinis ( $\cdot 016\text{--}018 \times 007$  mm.).

On stems of *Megarrhiza*. (Harkness, 2086.)

**Didymella fuchsiae**, Cke. & Hk.

Sparsa vel subgregaria. Peritheciis globoso-depressis, atris, epidermide tectis, ostiolo conico prominulo emergente. Ascis cylindrico-clavatis, octosporis. Sporidiis biserialibus, rectis curvulivse, uniseptatis, nec constrictis, binucleatis, hyalinis ( $\cdot 015 \times \cdot 005$  mm.).

On stems of *Fuchsia*. (Harkness, 2374.)

**Amphisphaeria dothideaaspora**, Cke. & Hk.

Gregaria. Peritheciis emergentibus, epidermide nigrofacta obtectis, conico-convexis, nitidis, ostiolo papillato. Ascis subclavatis, octosporis. Sporidiis subellipticis, inæqualiter uniseptatis, constrictis, fuligineis ( $\cdot 02 \times \cdot 012$  mm.).

On stems of *Mimulus*. (Harkness, 2217, 2508.)

***Leptosphaeria straminis*, Cke & Hk.**

Culmicola. Peritheciis sparsis vel subgregariis, in maculos effusos nigrofactos insidentibus, erumpentibus, atris, convexis, pertusis. Ascis cylindrico-clavatis, octosporis. Sporidiis lanceolatis quinqueseptatis, leniter constrictis, fuscis, loculis binis centralibus longitudinaliter divisis ( $\cdot032\text{--}\cdot035 \times \cdot006\text{--}\cdot008$  mm.).

On culms of straw. (Harkness, 2337, 2376, 2408.)

***Leptosphaeria subcæspitosa*, Cke. & Hk.**

Erumpens. Peritheciis subglobosis, atris, subcæspitosis, 4.8 in cæspitulis congestis, vel in lineas elongatos dispositis. Ostiolis cylindricis, elongatis, emergentibus. Ascis clavatis, octosporis. Sporidiis lanceolatis, medio constrictis, quinqueseptatis, fuscis ( $\cdot035\text{--}\cdot038 \times \cdot007$  mm.).

On stems of *Geranium*. (Harkness, 2128.)

***Leptosphaeria phormicola*, Cke & Hk.**

Gregaria. Peritheciis punctiformibus, erumpentibus, epidermide tectis, dein fissurato-emergentibus, atris, convexulis, papillatis. Ascis clavatis, octosporis. Sporidiis sublanceolatis, utrinque rotundatis, biserialibus, triseptatis, vix constrictis, pallide fuscis ( $\cdot022 \times \cdot006$  mm.).

On *Phormium*. (Harkness, 2231, 2457.)

***Pleospora quadri septata*, Cke. & Hk.**

Peritheciis subgregariis, convexis, atris, nitidis, initio epidermide velatis, parvulis. Ascis clavatis, octosporis. Sporidiis subellipticis, distichis, quadri septatis, vix constrictis, cellulis uno altero ve longitudinaliter divisis, brunneis ( $\cdot02\text{--}\cdot022 \times \cdot008$  mm.).

On pods of gillyflower. (Harkness, 2184.)

***Hysterographium (Gloniopsis) insignis*, Cke. & Hk.**

Peritheciis gregariis, erumpentibus, ovalibus vel ellipticis ( $\frac{1}{2}\text{--}1$  mm. long) atris, subnitidis, labiis arte conniventibus. Ascis clavatis, octosporis. Sporidiis lanceolatis, utrinque acuminatis, medio constrictis, 5-7 septatis, muriformibus, hyalinis ( $\cdot02 \times \cdot01$  mm.).

On wood of *Acacia*. (Harkness, 2382.)

***Phacidium arbuti*, Cke. & Hk.**

Receptaculis emergentibus, denum subsuperficialibus, applanatis, atris, discoideis, quadratis, triangulis, vel difformibus ( $\frac{1}{3}\text{--}\frac{1}{2}$  mm.), margine obtuse dentato. Ascis clavatis, octosporis. Sporidiis biserialibus, elliptico-lanceolatis, continuis, hyalinis ( $\cdot012\text{--}\cdot014 \times \cdot005$  mm.).

On leaves of *Arbutus Menziesii*. (Harkness, 2122.)

## SOME EXOTIC FUNGI.

By M. C. COOKE.

## AUSTRALASIA.

**Fomes (Fometaxii) pyrrhocreas, Cooke.**

Durus, effusus, centro affixus, margine reflexo, arcte pileiformi, sulcato-zonato, glabro, brunneo, crusta dura tecto; contextu aurantio-rubro; hymenio pallido, marginato. Tubulis brevibus stratosis, poris minutissimis, rotundis, æqualibus ( $\frac{1}{8}$  mm.) disse-pimentis crassiusculis.

On logs. New Guinea. (Capt. Armit.)

Allied to *P. Kermes* B., from which it differs in the smooth brown pileus, and smaller pores, as well as in the hard crust of the pileus. Apparently commonly resupinate with the margin reflexed and forming a narrow pileus of about  $\frac{1}{2}$  an inch in depth,  $\frac{1}{4}$  inch thick, and 3 inches long.

**Aleurodiscus tabacinus, Cooke.**

Erumpens, cupulæformis, gregarius. Pileo subelliptico (2-3 mm. long), rugoso, crispulo, brunneo, tomentoso, margine crassiusculo dilutiori, connivente, pilis rectis, subrigidis (circa 1 mm. long), basidiis clavato-cylindricis, guttulatis. Sporis ellipticis, continuis, granulatis (0.025-0.028 × 0.01 mm.).

On naked wood. Moona, New South Wales. (Crawford.)

Whether the genus, as described, be a good one or not, the present is evidently congeneric with the species hitherto associated under it. Perhaps the large clavate bodies in the hymenium may not be asci, but basidia. The species should be examined carefully when living.

**Hymenochæte olivaceum, Cooke.**

Effusum, atro-olivaceum, rugosum, velutinum, margine albido fibroso adnato circumdatum. Setis cylindrico-clavatis, scabrosis, deorsum profunde attenuatis, pallidis, contextu dense fibroso, intertexto.

On dead branches. Toorvoomba, Australia.

Resembling *Hym. umbrinum* B., but very different in colour, thinner, and with a distinct pale fibrous margin.

**Mesophellia scleroderma, Cooke.**

Peridio duro, suberoso, ochraceo, globoso-depresso (1 $\frac{1}{2}$ -2 in. diam.), extus ad apicem in areolas rhomboideas fissurato, intus olivaceo, centro vacuo. Sporis ellipticis, subhyalinis (0.01 × 0.004 mm.), capillitio obsoleto.

On the ground. New Zealand. (Reader, 50.)

**Uredo Anguillariæ, Cooke.**

Amphigena, soris gregarii, ellipticis, bullatis, din epidermide tectis, sporis globosis, vel globoso-ovalibus, lœvibus, fuscis, episporio tenui (0.02-0.022 × 0.02 mm.), pedicellis brevibus, hyalinis, deciduis.

On leaves of *Anguillaria dioica*. Guntawang, Upper Macquarie River, Australia. (Hamilton, No. 9.)

***Uromyces microtidis*, Cooke.**

Amphigenum. Soris gregariis, sub-hemisphaericis, atro-fuscis, epidermide cinctis. Sporis ovalibus, verrucoso-asperatis, hyalino-apiculatis, fuscis ( $\cdot03 \times \cdot016$  mm., apiculo inclusis), pedicellis brevissimis, deciduis.

On leaves of *Microtis porrifolia*. Bulladulah, N. S. Wales.

***Zignoina subcorticalis*, Cooke.**

Sparsa. Peritheciis semi-immersis, pertusis, atris, opacis. Ascis cylindricis, octosporis. Sporidiis ellipticis, hyalinis, continuis ( $\cdot012 \times \cdot004$  mm.).

Inside dead bark of trees. Australia.

***Sphaerella trichomanes*, Cooke.**

Sparsa vel subcaespitosa. Peritheciis semi-immersis, punctiformibus, atris, cuticulâ tenui primo tectis, punctato-pertusis. Ascis clavatis ( $\cdot03 \times \cdot005$  mm.), ostosporis. Sporidiis cylindricis, utrinque rotundatis, uniseptatis, hyalinis ( $\cdot008 \times \cdot002$  mm.).

On living fronds of *Trichomanes*. Samoa.

## SOUTHERN ASIA.

***Panus aureo-fulvus*, Cooke.**

Pileo carnosus, subcoriaceo, sessili, flabelliformi, multifido, velutino, aureo-fulvo; lamellis ad basim subdiscoideam decurrentibus, confertissimis, tenuissimis, angustis, concoloribus.

On logs. Perak, 1893.

Similar in size and general appearance to *Ag. anthocephalus*, Lev., but differs in the densely velvety pileus.

***Lentinus brevipes*, Cooke.**

Pileo carnosus-coriaceo, tenui, infundibuliformi, pallido, fusco-maculato, glabrescente, margine sublobato, undulatove, striatulo; stipite brevi, deorsum attenuato, ochroleuco, subvelutino, vel subsquamoso; lamellis decurrentibus, furcatis, latinsculis, vix confertis, interstitiis subtomentosis, pallidis.

On logs. Perak, 4,842.

Pileus 3 in. in diam. Stem 1 in. long,  $\frac{1}{2}$ - $\frac{3}{4}$  in. thick

***Polyporus (Petaloïdes) cochleariformis*, Cooke.**

Pileo carnosus-lento, spathulato; velutino, glabrescente (sicco fuligineo) postice in stipitem elongatè attenuato, margine acuto demum lobato-fissurato; stipite subæquali cylindrico, quandoque connato, velutino, umbrino, ad basim discoideo; hymenio pallido poris rotundis, æqualibus, mox laceratis confluentibusque ( $\frac{1}{5}$  mm. diam.) dissepimentis tenuibus.

On logs. Perak, 2821.

Pilens 1 in. broad,  $1\frac{1}{2}$  in. long. Stem  $1\frac{1}{2}$ -2 in. long, 3 millimetres thick, sometimes caespitose.

***Polystictus (Discipes) rigescens*, Cooke.**

Pileo carnosus-molli, tenui, demum rigidò, contracto, flabelliformi, saepe sublobato, zonato, purpureo-fusco, glabro, stereiformi, pos-

tice attenuato discoideo-affixi, margine acutissimo, flexuoso Hymenio albido. Poris minutissimis, sub lente vix conspicuis, æqualibus, rotundatis ( $1\frac{1}{10}$  mm.) dissepimentis tenuibus.

On rotting logs. Perak, 4818.

Allied to *P. thelephoroides*, Hook, but not so thin, darker coloured, discoid at the base, and with much smaller pores.

Pileus 2-3 in. broad and long, thin, contracted and contorted in drying.

**Polystictus (Discipes) Malaiensis, Cooke.**

Pileo coriaceo, tenui, flabelliformi, lobato, vinoso-fusco, zonato, sericeo-nitido, margine acuto; stipite brevi, disciformi, hymenio umbrino. Poris rotundis, æqualibus ( $\frac{1}{5}$  mm.) dissepimentis tenuisculis, quandoque laceratis, contextu rhabarbarino.

On logs. Perak, 5398.

Pileus 3 in. or more long. Stem scarcely exceeding half an inch, often less. Allied to *P. discipes*, B.

**Asterina concentrica, Cooke.**

Maculis atrofuscis, orbicularibus vel confluentibus. Peritheciis minutis, applanatis, concentrice dispositis, margine radiante, ascis clavatis, octosporis. Sporidiis ellipticis, continuis (?) hyalinis, ( $.008 \times .003$  mm.) valde immaturis.

On culms of *Saccharum*. N.W. India.

**Asterina crustacea Cooke.**

Amphigena, crustacea, atra; peritheciis applanatis, in maculas orbicularibus confluentibus; margine radiato-fimbriato, arcte adnato; ascis obovato-pyriformibus, octosporis. Sporidiis ellipticis, uniseptatis, medio constrictis, fuscis ( $.032 \times .015 \times .016 \times .018$  mm.).

On dead leaves of *Rhododendron*.

Mount Malabar 4000-7000 feet. Java. (Dr. Th. Anderson.)

### SOUTH AFRICA.

**Æcidium Loranthi, Cooke.**

Gregarium, amphigenum. Peridiis emergentibus, elongatis, cylindraceis; ore lacerato; sporis angulariter subglobosis, aurantiacis ( $.02$  mm. diam.).

On leaves of *Loranthus*. Botanic Garden, Durban. (J. M. Wood, No. 830.)

Cells of the peridium oblong, very irregular in size and outline about  $.03 \times .02$  mm.

### NORTH AMERICA.

**Radulum concentricum, Cke. & Ellis.**

Late effusum, crustaceum, glabrum, lutescens, tuberculis inæqualibus, elongatis, subteretibus, aliis conicis, aliis spathulatis, aliisque confluentibus, plus minusve concentricalibus, plerumque ambitu abbreviatis, subvenosis.

On logs. Oregon. (J. B. Ellis.).

**Cytispora smilacis, Cooke.**

Stromatibus pustulatis, gregariis, convexis, innato-erumpentibus, pauci-locularibus, sporulis minutissimis, cylindricis, vix curvulis hyalinis ( $\cdot004 \times \cdot002$  mm.) sterigmatibus duplo longioribus.

On exposed roots of *Smilax*. Darien, Georgia. (Ravenal, 3175.)

**Hysterium (Gloniella) syconophilum, Cooke.**

Peritheciis gregariis, lanceolatis, rectis vel flexuosis, atris, emergentibus, rimula longitudinali angusta notatis, ascis subclavatis, octosporis; sporidiis sublanceolatis, multinucleatis, demum quinque-septatis, hyalinis ( $\cdot036\cdot04 \times \cdot008\cdot01$  mm.).

On living bark of *Ficus carica*. S. Carolina. (Ravenal, 4074.)

**Ailographum arundinariae, Cooke.**

Peritheciis erumpentibus, demum superficialibus, gregariis, linearibus, rectis, plerumque longitudinaliter confluentibus, labiis arctatis, atris subnitidis (1-2 mm. long). Ascis pyriformibus, octosporis; sporidiis subellipticis, deorsum attenuatis, uniseptatis, nec constrictis, hyalinis ( $\cdot013\cdot015 \times \cdot005$  mm.).

On culms of *Arundinaria*. Darien, Georgia. (Ravenal, 3223.)

## SYNOPSIS PYRENOMYCETUM.

(Continued from Vol. XIII, p. 109.)

1508. **Diatrype verruciformis, Ehr.**

To this species may probably be referred *Diatrypella affinis*, Cooke, with elongated or confluent pustules on *Sambucus*; and also *Diatrypella subglobata*, Cooke and Gerard. On *Robinia* in the United States.

1604. **Diatrype berberidis, Cooke.**

Stromatibus verruciformibus, innato-erumpentibus, oblongis vel confluentibus, scabris, atris, ligno affixis; peritheciis minimis, numerosis. Ascis clavato-stipitatis, octosporis. Sporidiis allantoideis in parte sporifera stipatis, hyalinis ( $\cdot014 \times \cdot002$  mm.).

On branches of *Berberis vulgaris*. Near Bristol (C. Bucknall).

1626. **Hillia ferruginea, Karst. Myc. Fenn. 20, 195.**

We fail to see either the reason or the authority for altering this to *Sillia*. Sacc. Syll. II., 361.

1652. **Valsaria actidia, Berk & Rav. in Herb. Berk.**

Stromatibus innato-emergentibus, peritheciis magnis, paucis (4-6), ostiolis cuneiformibus, stellato-dispositis. Ascis amplis (tetrasporis ?). Sporidiis ellipticis, uniseptatis, constrictis, fuscis ( $\cdot04\cdot042 \times \cdot016\cdot018$  mm.).

On branches of *Ostrya* and *Carpinus*. S. Carolina (Rav. 2381, 2425).

*Fam. 5. DIATRYPEÆ. Compositæ. Perithecia in stromate heterogeneum immersa.*

*GEN. 1. DIATRYPE, Fries.* Stroma erumpenti-subsuperficiale, effusum, disciforme, vel subverruciforme.

\* *DIATRYPILLA. Not.* Asci polyspori. Sporidia allantoidea, hyalina.

1508. <i>verruciformis</i> , <i>Ehr.</i> ...	743	1522. <i>minuta</i> , <i>Ntke.</i> ...	757
== <i>affinis</i> , <i>Cooke.</i>		1523. <i>melaleuca</i> , <i>Kze.</i> ...	758
== <i>subglobata</i> , <i>Cke. &amp; Ger.</i>		1524. <i>quercina</i> , <i>P.</i> ...	759
1509. <i>favacea</i> , <i>Fr.</i> ...	744	1525. <i>opaca</i> , <i>Cke.</i> ...	760
1510. <i>nigroannulata</i> , <i>Grev.</i> ...	745	1526. <i>discoidea</i> , <i>C. &amp; Pk.</i> ...	761
== <i>angulata</i> , <i>Fr.</i> ...		1527. <i>olivacea</i> , <i>C. &amp; Ellis</i>	762
1511. <i>circumvallata</i> , <i>Nees.</i> ...	746	1528. <i>irregularis</i> , <i>C. &amp; Ellis</i>	763
1512. <i>Tocciaeana</i> , <i>Not.</i> ...	747	1529. <i>subfulva</i> , <i>B. &amp; Curt.</i> ...	764
1513. <i>protrusa</i> , <i>Pr.</i> ...	748	1530. <i>Frostii</i> , <i>Peck.</i> ...	765
1514. <i>decorata</i> , <i>Ntke.</i> ...	749	1531. <i>betulina</i> , <i>Peck.</i> ...	766
1515. <i>exigua</i> , <i>Wint.</i> ...	750	1532. <i>melasperma</i> , <i>Fr.</i> ...	767
1516. <i>pulvinata</i> , <i>Ntke.</i> ...	751	1533. <i>Lirioidendri</i> , <i>Schw.</i> ...	768
1517. <i>intermedia</i> , <i>Karst.</i> ...	752	1534. <i>cephalanthi</i> , <i>Schw.</i> ...	769
1518. <i>aspera</i> , <i>Fr.</i> ...	753	1535. <i>melaena</i> , <i>Ntke.</i> ...	770
1519. <i>sordida</i> , <i>P.</i> ...	754	1536. <i>deusta</i> , <i>Ellis &amp; M.</i> ...	5911
1520. <i>laevigata</i> , <i>Fckl.</i> ...	755	1537. <i>placenta</i> , <i>Rehm.</i> ...	5912
1521. <i>eutypoides</i> , <i>Nsl.</i> ...	756	1538. <i>prominens</i> , <i>Howe...</i> ...	5913

\*\* *DIATRYPE. Fries.* Asci octospori, sporidia allantoidea, hyalina.

a. *Stictosphaeria.* Stroma effusum.

1539. <i>stigma</i> , <i>Hoffm.</i> ...	705	1544. <i>concolor</i> , <i>Schw.</i> ...	4142
1540. <i>platystoma</i> , <i>Schw.</i> ...	707	1545. <i>afflata</i> , <i>Schw.</i> ...	1502
1541. <i>hypoxyloides</i> , <i>Not.</i> ...	708	1546. <i>discostoma</i> , <i>Cke.</i> ...	730
1542. <i>leucocreas</i> , <i>Mont.</i> ...	719	1547. <i>subaffixa</i> , <i>Schw.</i> ...	1545
1543. <i>tenuissima</i> , <i>Cke.</i> ...	729		

b. *Discosphaeria.* Stroma disciforme vel sub-verruciforme.

1548. <i>disciformis</i> , <i>Hoffm.</i> ...	703	1561. <i>collariata</i> , <i>C. &amp; E.</i> ...	716
1549. <i>albopruinosa</i> , <i>Schw.</i> ...	4143	1562. <i>capensis</i> , <i>K. &amp; Cke.</i> ...	717
1550. <i>euphorea</i> , <i>Schw.</i> ...	4131	1563. <i>caminata</i> , <i>K. &amp; Cke.</i> ...	718
1551. <i>virescens</i> , <i>Schw.</i> ...	4134	1564. <i>consobrina</i> , <i>Mont.</i> ...	720
1552. <i>bullata</i> , <i>Hoffm.</i> ...	704	1565. <i>Macowaniana</i> , <i>Thum.</i> ...	721
1553. <i>rimosa</i> , <i>Fckl.</i> ...	706	1566. <i>laurina</i> , <i>Rehm.</i> ...	722
1554. <i>macrothecia</i> , <i>Speg.</i> ...	709	1567. <i>ruficarnis</i> , <i>B. &amp; C.</i> ...	723
1555. <i>asterostoma</i> , <i>B. &amp; C.</i> ...	710	1568. <i>russodes</i> , <i>B. &amp; Br.</i> ...	724
1556. <i>hystrix</i> , <i>Fr.</i> ...	711	1569. <i>polycocca</i> , <i>Fckl.</i> ...	725
1557. <i>fibritecta</i> , <i>C. &amp; Ellis</i> ...	712	1570. <i>plagia</i> , <i>B. &amp; C.</i> ...	726
1558. <i>aurantii</i> , <i>Not.</i> ...	713	1571. <i>orthosticha</i> , <i>Mont.</i> ...	727
1559. <i>corniculata</i> , <i>Ehr.</i> ...	714	1572. <i>theloides</i> , <i>B. &amp; Br.</i> ...	728
1560. <i>chlorosarca</i> , <i>B. &amp; Br.</i> ...	715	1573. <i>brassicæ</i> , <i>Cke., Grev.</i> ...	

- |       |                                     |      |      |       |   |      |      |
|-------|-------------------------------------|------|------|-------|---|------|------|
| 1574. | Duriæi, <i>Mont.</i>                | ...  | 731  | 1590. | sordida, <i>P.</i>                          | ...  | 4145 |
| 1575. | eucalypti, <i>Cke.</i>              | &    |      | 1591. | sambucivora, <i>Schw.</i>                   | 4155 |      |
|       | <i>Hk.</i>                          | ...  | 732  | 1592. | annulans, <i>Schw.</i>                      | ...  | 4157 |
| 1576. | caricæ, <i>Not.</i>                 | ...  | 733  | 1593. | bicolor, <i>B.</i> & <i>Curt.</i>           | 1461 |      |
| 1577. | acericola, <i>Not.</i>              | ...  | 734  | 1594. | callicarpæ, <i>B.</i> & <i>Rav.</i> ,       |      |      |
| 1578. | Daldiniana, <i>Not.</i> ...         | 735  |      |       | <i>F. Car.</i> iv., 41                      |      |      |
| 1579. | tristicha, <i>Not.</i>              | ...  | 736  | 1595. | capnóstoma, <i>B.</i> & <i>Rav.</i> ,       |      |      |
| 1580. | radulans, <i>B.</i> & <i>Cke.</i>   | 737  |      |       | <i>F. Car.</i> iv., 42                      |      |      |
| 1581. | prominens, <i>Cke.</i> & <i>Hk.</i> | 738  |      | 1596. | subferruginea, <i>B.</i> & <i>Rav.</i> ,    |      |      |
| 1582. | smilacicola, <i>Schw.</i>           | 739, |      |       | <i>F. Car.</i> iv., 44                      |      |      |
|       |                                     | 4137 |      | 1597. | ceanothi, <i>Cke.</i> & <i>Hark.</i> ,      |      |      |
| 1583. | glomeraria, <i>Berk.</i>            | 740  |      |       | <i>Grev.</i> xiii., 17                      |      |      |
| 1584. | pachyloma, <i>Lev.</i> ...          | 742  |      | 1598. | variolosa, <i>Schw.</i>                     | ...  | 4153 |
| 1585. | azedarachtæ, <i>Cke.</i>            | 5908 |      | 1599. | manipularis, <i>B.</i> & <i>C.</i> , in     |      |      |
| 1586. | radiata, <i>Ellis</i>               | ...  | 5909 |       | <i>Herb. Curt.</i>                          |      |      |
| 1587. | Delacourii, <i>Fab.</i> ...         | 5910 |      | 1600. | petiginosa. <i>Fr.</i> ( <i>Mougeot.</i> )  |      |      |
| 1588. | friabilis, <i>Pers.</i>             | ...  | 4150 | 1601. | berberidis, <i>Cke.</i> , <i>Grev.</i> xiv. |      |      |
| 1589. | rhois, <i>Schw.</i>                 | ...  | 4132 |       |   | 14   |      |

\* \* \* *Imperfectæ cognitæ.*

1602. pilulifera, Fries ... 4129    1604. collecta, Schw. ... 4156  
 1603. subconfluens, Schw. 4154    1605. æquilinearis, Schw. 4163

\*\* Sporidia continua, subellipsoidea, hyalina.

1606. anomala, Peck. ... 1813 1607. interrupta, Mont.... 2394

\*\*\* *Sclerostoma*. (a) Sporidia uniseptata, hyalina.

- |   |     |      |  |      |
|---|-----|------|--|------|
| 1608. sphendamnina, <i>B.</i> &<br><i>Curt.</i> | ... | 2367 | 1614. nucleata, <i>Curr.</i> ...                                       | 2393 |
| 1609. platasca, <i>Berk.</i>                    | ... | 2374 | 1615. crassiuscula, <i>Sacc.</i>                                       | 2406 |
| 1610. aristata, <i>Fr.</i>                      | ... | 2375 | 1616. sordida, <i>Curr.</i> , <i>Linn.</i><br><i>Trans. xxv.</i> , 246 |      |
| 1611. strumella, <i>Fr.</i>                     | ... | 2376 | 1617. carpinigera, <i>B. &amp; C.</i>                                  | 6092 |
| 1612. varians, <i>Curr.</i>                     | ... | 2379 | 1618. bispora, <i>B. &amp; C.</i> , <i>Riv. iv.</i> ,                  |      |
| 1613. helicis, <i>Niessl.</i>                   | ... | 2380 |  | 45   |

(b) sporidia uniseptata, appendiculata.

1619. *hystrix*, *Tode*. ... 2416 1620. *pyrrhocystis*, *B&Br.* 2420

\*\*\* *Calospora*. Sporidia triseptata.

1621. *ulicis*, *Fr.* ... 3702 1623. *rhoina*, *C. & E.* ... 3707  
1622. *undulata*, *B. & B.* 3705

\*\*\*\* *Hillia*. Sporidia multiseptata.

1624. ferruginea (Pers.) K. 4115

\*\*\*\* *Fuckelia*. Sporidia continua, fusca.

1625. microspora, *Ellis...* 1146    1627. cercidicola, *B. & C.* 1136  
       = *Ellisii*, Sacc.                          1628. dryophila, *Curr. ...* 1149  
 1626. turgida, *Fr.*     ... 1128    1629. phæosperma, *Ellis.* 5936

- |   |      |  |
|---|------|--|
| 1630. denigrans, <i>Curr.</i> ...                                 | 1148 | 1635. adusta, <i>Cke.</i> & <i>Ell.</i> 1142             |
| 1631. atrofusca, <i>B. &amp; Curt.</i> , <i>Grev.</i><br>xii., 51 |      | 1636. amplispora, <i>Cke.</i> , <i>Grev.</i><br>xii., 51 |
| 1632. insidiosa, <i>Cr.</i> ...                                   | 1139 | 1637. Auerswaldii, <i>Nsl.</i> ... 1138                  |
| 1633. linosperma, <i>Mont.</i> 1132                               |      | 1638. amoena, <i>Ntke.</i> ... 1145                      |
| 1634. teniospora, <i>Sacc.</i> ... 1130                           |      | 1639. aceris, <i>C.</i> & <i>Ellis</i> 1423              |
| ***** <i>Valsaria</i> . Sporidia uniseptata, fusca.               |      |  |
| 1640. insitiva, <i>Ces.</i> ...                                   | 2807 | 1647. Farlowiana, <i>Sacc.</i> ... 2824                  |
| 1641. cincta, <i>Curr.</i> ...                                    | 2809 | 1648. moroides, <i>Cke.</i> & <i>Pk.</i> 2839            |
| 1642. syconophila, <i>Schulz.</i> 2811                            |      | 1649. lophiostoma, <i>Hars.</i> 2841                     |
| 1643. viticola, <i>Schw.</i> ...                                  | 2812 | 1650. actidia, <i>B. &amp; Rav.</i> , <i>Grev.</i> xiv.  |
| 1644. diospyri, <i>Schw.</i> ...                                  | 2813 | 14   |
| 1645. anthostomoides, <i>Sacc.</i> 2817                           |      | 1651. Robiniæ, <i>Schw.</i> ... 4133                     |
| 1646. angularis, <i>Peck.</i> ...                                 | 2820 |  |

## PRÆCURSORES AD MONOGRAPHIA POLYPORORUM.

By M. C. Cooke.

(Continued from p. 119.)

\*\* *Contextu pallido, lignicolori.*

- 412 *pinicola*, *Fr. Hym. Eur.* 561.  
 413 *marginatus*, *Fr. Hym. Eur.* 561.  
 414 *pini-canadensis*, *Schw. Amer. Bor.* 410.  
 415 *rufopallidus*, *Fr. Hym. Eur.* 561.  
 416 *gelsorum*, *Fr. Hym. Eur.* 563.  
 417 *rugulosus*, *Lev. Ann. Sci. Nat.* 1844, 188.  
     = *monochrous*, Mont.  
 418 *glabrescens*, *Berk. Ann. Nat. Hist.* 1839.  
 419 *Steveni*, *Lev. Demid. Voy.* II. 91 t. 2.  
 420 *dochmius*, *B. & Br. Linn. Journ.* xiv. 50.  
 421 *cinnamomeus* (*Trog*) *Fr. Hym. Eur.* 561.  
 422 *squalidus*, *Fr. Epic.* 469.  
 423 *scabrosus*, (*P.*) *Fr. Epic.* 469.  
 424 *Thomsoni*, *Berk. Hook Journ.* 1852, 142.  
 425 *cupreus*, *Fr. Novæ. Symb.* 48.  
 426 *polytropus*, *B. & Br. Linn. Journ.* xiv. 49.  
 427 *perpusillus* (*P.*) *Ann. Sci. Nat.* 1844, 191.  
 428 *introstuppeus*, *B. & C. Grev.* xiii. 2.  
 429  *sulcatus*, *Cke. Grev.* xiii. 32.

\* \* Contextu badio-fulvore.

- 430 sclerodes, *Berk. Linn. Journ.* x. 311.  
 431 mangiferæ, *Lev. Ann. Sci. Nat.* 1846, 129.

- 432 fastuosus, *Lev. Ann. Sci. Nat.* 1846, 134.  
 433 sordidus, *Lev. Ann. Sci. Nat.* 1844, 192.  
 434 trachodes, *Lev. Ann. Sci. Nat.* 1844, 192.  
 435 extensus, *Lev. Ann. Sci. Nat.* 1846, 129.  
 436 elatus, *Lev. Ann. Sci. Nat.* 1846, 129.  
 437 punctatus, *Jungh. Fl. Java*, 64.  
 438 multiplicatus, *Mont. Syll.* 156.  
 439 ochrolaccatus, *Mont. Ann. Sci. Nat.* 1842.  
 440 leucophaeus, *Mont. Syll.* 157.  
 441 galegensis, *Mont. Syll.* 158.  
 442 conchatus, *Fr. Hym. Eur.* 560.  
 443 lobatus, *Schw. Amer. Bor.* 409.  
 444 scalaris, *Berk. Hook. Journ.* vii. 236.  
 445 sclerodermus, *Lev. Ann. Sci. Nat.* 1846, 129.  
 446 megaloma, *Lev. Ann. Sci. Nat.* 1846, 128.  
 447 rhodophæus, *Lev. Ann. Sci. Nat.* 1844, 190.  
 448 Inzengæ (*Not.*), *Fr. Hym. Eur.* 557.  
 449 mirus, *Kalch. Bullet. Mosc.* 1877.  
 450 badius, *Berk.*, in *Herb.*

\*\*\* *Contextu umbrino v. fusco-purpureo.*

- 451 australis, *Fr. Hym. Eur.* 556.  
 452 chilensis, *Fr. Nov. Sym.* 47.  
 453 applanatus, *Fr. Hym. Eur.* 557.  
 454 nitens, *Fr. Epicr.* 463.  
 455 pediformis, *Fr. Epicr.* 463.  
 456 orbiformis, *Fr. Epicr.* 463.  
 457 nigro-laccatus, *Cke. Grev.* ix. 97.  
 458 endophæus, *Berk. Hook. Journ.* 1852, 142.  
 459 CErstedtii, *Fr. Nova Symb.* 47.  
 460 atro-umbrinus, *Berk. Hook. Journ.* 1856, 199.  
 461 mortuosus, *Fr. Nova Symb.* 48.  
 462 subflexibilis, *B. & C. Linn. Journ.* x. 311.  
 463 verruculosus (*Mey.*) *Fr. Epic.* 464.  
 464 vegetus, *Fr. Hym. Eur.* 556.  
 465 peguanus, *Mont. Syll.* 158.

\*\*\* *Contextu ferrugineo.*

- 466 fomentarius, *Linn. Suec.* No. 1252.  
 467 excavatus, *Berk. Ann. Nat. Hist.* 1839, 387.  
 468 nigricans, *Fr. Hym. Eur.* 558.  
 469 ignarius, *Fr. Hym. Eur.* 559.  
 470 marmoratus, *Berk. & Curt.*  
 471 zealandicus, *Cke. Grev.* viii. p. 55.  
 472 rimosus, *Berk. Hook Journ.* 1845, 54.  
 473 roburneus, *Fr. Hym. Eur.* 557.  
 474 fulvus, *Fr. Hym. Eur.* 559.  
     (= *Noræ-Angliae*, *B. & C. Grev.* i. 51.)  
 475 loniceræ, *Weinm. Syll.* 102.  
     var. euonymi, *Kalch.*

- 476 tropicus, *Jungh. Fl. Java*, 63.  
 477 scleromyces, *B. & C. Linn. Journ.* x. 312.  
 478 rhytiphlæus, *Mont. Sci. Nat.* v. 369.  
 479 gryphaeformis, *Berk. Hook. Journ.* 1845, 54.  
 480 leprosus, *Fr. Epic.* 464.  
 481 glaucotus, *Cke. Grev.* ix. 13.  
 482 ribis, *Fr. Hym. Eur.* 560.  
 483 fusco-purpureus, *Boud. Bull. Soc. Fr.* 1881, 92.  
     = *rubriporus*, Quelet.  
 484 salicinus, *Fr. Hym. Eur.* 560.  
 485 Korthalsii, *Lev. Ann. Sci. Nat.* 1846, 133.  
 486 albo-marginatus, *Zipp. Ann. Sci. Nat.* 1844, 191.  
 487 aruensis, *Berk. Linn. Journ.* xvi. 43.  
 488 ? focalis, *Kalch. Grev.* x. 54.

\*\*\*\* Contextu flavo v. olivaceo.

- 489 endothejus, *Berk. Linn. Journ.* xvi. 46.  
 490 subolivaceus, *B. & C. Linn. Journ.* x. 313.

\*\*\*\* Contextu rubro.

- 491 crocitinctus, *B. & C. Linn. Journ.* x. 311.  
 492 kermes, *B. & Br. Linn. Journ.* xiv. 49.  
 493 pyrrhocreas, *Cke. Grev.* xiv. 11.  
 494 lateritius, *Cke. Grev.* ix. 12.  
 495 Demidoffii, *Lev. Demid. Voy.* ii. 93.  
 496 roseus, *A. & S. Fr. Hym. Eur.* 562.

**E. Impoliti.** Pileus dimidiatus, lignosus, perennis, primitus anodermeus, floccosus l. pruinosis, dein indurato-incrustatus, a substantia ipsa rigente. Contextus fibroso-radians, descendens in poros stipatos elongatos non stratosos.

\* Contextu pallido.

- 497 Martius, *Berk. Hook. Journ.* 1856, 198.  
 498 hemileucus, *B. & Curt. Linn. Journ.* x. 312.  
 499 exotephrus, *Berk. Linn. Journ.* xvi. 49.  
 500 contrarius, *B. & Curt. in Herb. Berk.* 2634.

\*\* Contextu fulvo cinnamomeo.

- 501 tasmanicus, *Berk. Fl. Tasm.* ii. 254.  
 502 Fullageri, *Berk. Linn. Journ.* xvi. 54.  
 503 inamænus, *Mont. Ann. Sci. Nat.* 1842, 22.  
 504 auriformis, *Mont. Syll.* 160.  
 505 sarcitus, *Fr. Nova. Symb.* 50.  
 506 capucinus, *Mont. Ann. Sci. Nat.* v. 369.  
 507 heteroporus, *Mont. Syll.* 156.  
 508 rufo-flavus, *B. & C. Linn. Journ.* x. 310.  
 509 pullus, *Mont. Syll.* 157.  
 510 pusiulus, *Ces. Fungi Borneensis*.  
 511 scutellatus, *Schw. Amer. Bor.* 387.

\*\* *Contextu rhabarbarino vel ferrugineo.*

- 512 holosclerus, *Berk. Hook. Journ.* 1856, 200.
- 513 spadiceus, *Berk. Ann. Nat. Hist.* 1839, 388.
- 514 caryophylleus, *Cke. Grev.*
- 515 inflexibilis, *Berk. Hook. Journ.* 1856, 199.  
= *recurvus*, Berk.
- 516 pectinatus (*Klot.*), *Fr. Hym. Eur.* 559.
- 517 linteus, *Berk. U.S. Exp. Ex.* No. 96.
- 518 calvescens, *Berk. Ann. Nat. Hist.* 1839, 390.
- 519 caliginosus, *Berk. Linn. Journ.* xvi. 46.
- 520 rubiginosus, *Berk. Ann. Nat. Hist.* iii. 324.
- 521 loricatus, *Pers. Myc. Eur.* ii. 86.
- 522 substygicus, *B. & Br. Ceylon Fungi* No. 463.

\*\* *Contextu umbrino.*

- 523 nicaraguensis, *B. & Curt. Proc. Am. Acad.* iv. 122.
- 524 Gourliæi, *Berk. Fl. Tasm.* ii. 253.
- 525 endopalus, *Berk. Linn. Journ.* xiii. 163.
- 526 calcitratus, *B. & Curt. Linn. Journ.* x. 314.
- 527 strigatus, *Berk. Hook. Journ.* 1847, 502.
- 528 Curreyi, *Berk. in Herb. Berk.*  
= *xerophyllaceus*, Currey.

\*\*\* *Contextu atroviolaceo.*

- 529 melanoporus, *Mont. Cuba* 422.

\*\*\* *Contextu ignotæ.*

- 530 ponderosus, *Kalch. Grev.* x. 99.

**F. Lævigati.** Pileus dimidiatus, lignosus (etiam primitus aridus quo a Lignescentibus supra differt) cuticula tenui, lævigata (non discreta heterogenea) tectus subpolitus (junior vero saepe flocculosus). Pori stipati, non stratosi, contextus floccoso-fibrillosus, pallidior.—*Lignosi*, Fr. Epic. 470.

\* *Contextu albo v. albido.*

- 531 connatus, *Fr. Hym. Eur.* 563.
- 532 Neesii, *Fr. Hym. Eur.* 564.
- 533 annosus, *Fr. Hym. Eur.* 564.  
= *scoticus*, Klot.
- 534 populinus, *Fr. Hym. Eur.* 564.
- 535 castaneus, *Fr. Hym. Eur.* 564.
- 536 ægerita, *Fr. Nova Symb.* 55.
- 537 microporus, *Fr. Epic.* 472.
- 538 nubilus, *Fr. Epic.* 471.
- 539 cingulatus, *Berk. Hook. Journ.* 1854, 164.
- 540 Thwaitesii, *Berk. Hook. Journ.* 1854, 228.

\*\* *Contextu pallido.*

- 541 fraxineus, *Fr. Hym. Eur.* 563.  
     = *fraxinophilus*, Peck. *Bot. Gaz.* 1872, 43.  
 542 hemitephrus, *Berk. Fl. N. Zeal.* ii. 179.  
 543 variegatus (*Seer.*), *Fr. Hym. Eur.* 563.  
 544 fasciatus, *Fr. Epic.* 470.  
 545 semitostus, *Berk. Hook. Journ.* 1852, 143.  
 546 ferreus, *Berk. Hook. Journ.* 1847, 502.  
 547 concentricus, *Cke. Grev.* ix. 13.  
 548 laevissimus, *Fr. Epic.* 470.  
 549 Kamphœveni, *Fr. Nova Symb.* 53.  
 550 scopulosus, *Berk. Hook. Journ.* 1852, 143.  
 551 sanguinarius (*Klot.*), *Fr. Epicr.* 471.  
 552 oblinitus, *Berk. in Herb. Kewensis.*

\*\* *Contextu carneo.*

- 553 carneus, *Nees. Nova Acta.* xiii. t. 3.  
 554 coccineus, *Fr. Nova Symb.* 51.  
     = *pandani*, *Fr. Epic.* 469?

\*\* *Contextu umbrino.*

- 555 cinereo-fuscus, *Curr. Linn. Trans.* 1876, 124.  
 556 placodes, *Kalch. Grev.* iv. 73.  
 557 tostus, *Berk. Hook. Journ.* 1844, 189.  
 558 semi-laccatus, *Berk. in Herb.*  
 559 arenosus, *Cke. Grev.* xiii. 2.  
 560 sepiater, *Cke. Grev.* ix. 100.

\*\*\* *Contextu rhabarbarino v. ferrugineo.*

- 561 adamantinus, *Berk. Hook. Journ.* 1852, 141.  
 562 omalopilus, *Mont. Cub.* 423.  
     = *carneo-sulvus*, *Berk.*  
 563 Palliseri, *Berk. in Herb. Berk. No.* 2562.  
     = *Trametes arcticus*, *Berk. No.* 3044.  
 564 supinus, *Fr. Epic.* 471.  
     = *Valenzuelianus*, *Mont. Cub. t. 15 f. 4.*  
 565 incrassatus, *Berk. Linn. Journ.* xvi. 41.  
     = *reniformis*, *Morg. Bot. Gaz.* 1882, 136.

G. **Resupinati.** Pileus resupinatus vel margine reflexo.

- 566 cryptarum (*Bull.*), *Fr. Hym. Eur.* 566.  
 567 tropicalis, *Cke. Grev.* xiii. 32.  
 568 obliquus, *Fr. Hym. Eur.* 570.  
 569 luridus, *Kalch. Grev.* x. 103.  
 570 bistratosus, *B. & Cke. Linn. Journ.* xv. 384.  
 571 acupunctatus, *B. & Br. Linn. Journ.* xiv. 52.  
 572 bicolor, *Jungh. Fl. Java* 54.

## MUSCOLOGIA GALLICA.

Mons. T. Husnot is publishing a work under the above title in Royal octavo, to be completed in 10 parts, at five francs each. The letterpress consists of 32 pages in each part, and is accompanied by eight or ten plates, so that the entire work will contain some 320 pages of printing, and from 80 to 100 plates. The latter are in the style, and remind one of Wilson's "Bryologia," although not so neat and clear in execution, exhibiting, in fact, just the difference between plate-printing and lithography. Nevertheless there can be no just complaint when the price is taken into consideration, and we doubt not British Bryologists will find it very useful during the period which must elapse before the completion of Dr. Braithwaite's more elaborate work, which, by the way, we should be glad to see at shorter and less uncertain intervals.

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## WOOLHOPE FUNGUS FORAY.

The Woolhope Fungus Week commences this year on Monday, Oct. 5th, and the Club day is fixed for Thursday, Oct. 8th. Preceding this, on Friday and Saturday, Oct. 2nd and 3rd, the Essex Field Club hold their annual Fungus Excursions in Epping Forest.

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**FUNGI MORICOLÆ, DI A. N. BERLESE.** PART I.—This is decidedly in advance of the mycological works which have been published in Italy for many years, in its illustrations; and ten large octavo plates, in colour, with letterpress, cannot be considered at all unreasonable at five francs. We note the improvement with pleasure, and recommend the work to our readers, in the assurance that it will give satisfaction. The present part includes figures of 16 Ascomycetes, 3 Sphaeropsidei, and 1 Hymenomycete.

**BRITISH FRESH WATER ALGÆ.**—Messrs. Watson and Sons, of No. 313, High Holborn, are issuing a series of 24 microscopical slides, illustrating the most important genera of British Fresh Water Algæ, for the use of students, as a help to the beginner in this interesting branch of biology. Of course they are only a selection from the 120 genera, but even a selection will be found useful as a commencement, and nothing more was possible within the essential limits of number and price. It is confidently hoped that time will prove them well and permanently prepared, as well as carefully selected.

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## BRITISH SPHÆROPSIDEÆ.

## PROVISIONAL LIST OF SPECIES HITHERTO FOUND IN THE BRITISH ISLANDS.

By M. C. COOKE.

In the following catalogue the arrangement is based on the third volume of Saccardo's "Sylloge," with slight modifications as to the grouping. It includes all the species known to us, which have been discovered in Britain since the publication of the "Handbook."

**SPHÆROPSIDEÆ, Lev.**

Sporules (*Stylospores* and *Spermatia* of authors) without asci, produced on more or less manifest basidia, or sporophores, enclosed within a peritheciun.

*Fam. 1. SPHÆRIOIDEÆ, Sacc.*

Perithecia membranaceous, carbonaceous, or somewhat coriaceous (not fleshy or brightly coloured) globose, conical, or lenticular, entire, immersed or superficial.

*Sub.-Fam. I. PHOMOIDEÆ.*

Perithecia scattered, submembranaceous or carbonaceous, naked, usually papillate, not rostellate, opening by a pore. Sporules hyaline (rarely slightly coloured), for the most part continuous. Growing mostly on dead parts of plants.

*Gen. 1. PHOMA, Fries, Sacc. Syll. III., 65.*

Perithecia subcutaneous, then erumpent, submembranaceous, subcoriaceous, or subcarbonaceous, globose or compressed, smooth, erostate, with a minute ostiolum, which is sometimes obsolete. Sporules ovoid, fusoid, cylindrical, rarely sphæroid, continuous, hyaline, often biguttulate. Basidia filiform, sometimes very short or obsolete, simple, rarely furcate.

1. *On woody Dicotyledons.*A: **RAMICOLÆ.**

1. **Phoma coluteæ**, Sacc. Syll. 385.  
On *Colutea arborescens*. Kew; Dalston.
2. **Phoma coronillæ**, West. Sacc. Syll. 386.  
On *Coronilla emerus*, and *Baccharis halimifolia*. Kew.
3. **Phoma sophoræ**, Sacc. Syll. 389.  
On *Sophora japonica*. Kew.
4. **Phoma sarothamni**, Cooke. Sacc. Syll. 391.  
On *Sarothamnus*. Swanscombe.
5. **Phoma amorphæ**, Sacc. Syll. 393.  
On *Amorpha fruticosa*. Kew.

6. **Phoma herminieræ**, Cooke. *Grev. XIII.*, 93.  
On *Herminiera elaphroxylon*. Kew.
7. **Phoma rufis**, Sacc. *Syll. 395*.  
On *Laburnum*. Kew.
8. **Phoma Ryckholtii**, Sacc. *Syll. 404*.  
On *Syphoricarpus*. Kew.
9. **Phoma xylostei**, Cke. & Hk. *Sacc. Syll. 405*.  
On *Lonicera*. Kew.
10. **Phoma lonicerae**, Cooke. *Sacc. Syll. 407*.  
On *Lonicera*. Irstead (F.B. I., 616.)
11. **Phoma viventis**, Cooke. *Grev. XIV.*, 2.  
On living twigs of *Lonicera*. Kew.
12. **Phoma Beckhausii**, Cooke. *Grev. XIII.*, 91.  
On *Viburnum lantana*. Dartford ; Kew.
13. **Phoma weigeliæ**, Speg. *Sacc. Syll. 409*.  
On *Weigelia rosea*. Kew.
14. **Phoma sambucina**, Sacc. *Syll. 411*.  
On *Sambucus nigra*.
15. **Phoma sambucella**, Sacc. *Syll. 412*.  
On *Sambucus nigra*. Kew.
16. **Phoma vicinum**, Desm. *Sacc. Syll. 413*.  
On decorticated *Sambucus nigra*. Whitehall ; Ascot.
17. **Phoma Landeghemiae**, Sacc. *Syll. 414*.  
On *Philadelphus*. Kew.
18. **Phoma philadelphi**, Cooke. *Grev. XIII.*, 93.  
On *Philadelphus*. Kew.
19. **Phoma foveolaris**, Fries. *Sacc. Syll. 419*.  
On *Euonymus*. Kew.
20. **Phoma celastrinæ**, Cooke. *Grev. XIII.*, 92.  
On *Euonymus americanus*. Kew.
21. **Phoma berberina**, Sacc. *Syll. 420*.  
On *Berberis vulgaris*. Kew.
22. **Phoma prunorum**, Cooke. *Grev. XIII.*, 92.  
On *Prunus lauro-cerasus*. Kew.
23. **Phoma pruni-lusitanicæ**, Cooke. *Grev. XIII.*, 92.  
On *Prunus lusitanica*. Kew.
24. **Phoma Libertiana**, Sacc. & Roum. *Sacc. Syll. 427*.  
On *Larix europæus*. Kew.
25. **Phoma sorbariae**, Sacc. *Syll. 439*.  
On *Spiraea callosa*, and *S. opulifolia*. Kew.
26. **Phoma opulifoliæ**, Cooke. *Grev. XIV.*, 2.  
On *Spiraea opulifolia*. Kew.
27. **Phoma mali**, Sch. & Sacc. *Sacc. Syll. 440*.  
On apple twigs. Kew.
28. **Phoma ambigua**, Sacc. *Syll. 441*.  
On pear twigs. Kew ; Hampstead.
29. **Phoma amelanchieris**, Cooke. *Grev. XIII.*, 93.  
On *Amelanchier*. Kew.

30. **Phoma Mulleri**, Cooke. *Sacc. Syll.* 445.  
On *Rubus*. Eastbourne.
31. **Phoma pusilla**, Sch. & Sacc. *Sacc. Syll.* 450.  
On *Rosa canina*. Kew.
32. **Phoma incarcerata**, Sacc. *Syll.* 453.  
On *Rosa canina*. Kew.
33. **Phoma japonica**, Sacc. *Syll.* 458.  
On *Kerria japonica*. Neatishead (Norfolk).
34. **Phoma viniferæ**, Cooke (*viticola*, *Sacc. Syll.* 463).  
On *Vitis vinifera*. Kew.
35. **Phoma vitis**, Bon. *Sacc. Syll.* 464.  
On *Vitis vinifera*. King's Lynn ; Shere.
36. **Phoma Cookei**, Pir. *Sacc. Syll.* 468.  
On *Vitis vinifera*. Terrington (F.B. i., 618).
37. **Phoma diplodiooides**, Sacc. *Syll.* 475.  
On *Aesculus hippocastanum*. Kew.
38. **Phoma scobina**, Cooke. *Grev. XIII.*, 92.  
On *Fraxinus excelsior*. Kew ; Highgate ; Darenth.
39. **Phoma forsythiæ**, Cooke. *Grev. XIII.*, 92.  
On *Forsythia*. Kew.
40. **Phoma aromaticæ**, Cooke. *Grev. XIV.*, 3.  
On *Calycanthus occidentalis*. Kew.
41. **Phoma domestica**, Sacc. *Syll.* 480.  
On *Jasminum officinale*. Kew.
42. **Phoma jasmini**, Cooke. *Grev. XIV.*, 2.  
On *Jasminum officinale*. Kew.
43. **Phoma depressa**, Lev. *Sacc. Syll.* 481.  
On *Syringa vulgaris*. Kew.
- 43.\* **Phoma laurella**, Sacc. *Syll.* 486.  
On *Laurus nobilis*. Kew.
44. **Phoma rhododendri**, Cooke. *Grev. XIII.*, 93.  
On *Rhododendron*. Kew.
45. **Phoma rhoina**, Cooke. *Sacc. Syll.* 503.  
On *Rhus*. Whitehall ; Swanscombe.
46. **Phoma corni**, Fckl. *Sacc. Syll.* 506.  
On *Cornus*. Kew.
47. **Phoma pulla**, Sacc. *Syll.* 511.  
On *Hedera helix*. Kew ; Neatishead.
48. **Phoma barbæ**, Cooke. *Grev. XIV.*, 3.  
On *Lycium barbarum*. Kew.
49. **Phoma viridarii**, Sacc. *Syll.* 523.  
On *Magnolia*. Kew.
50. **Phoma stictica**, B. & Br. *Sacc. Syll.* 524.  
On *Buxus sempervirens*. Shrewsbury ; Kew.
51. **Phoma cistica**, Cooke, *Grev. XIV.*, 3.  
On *Cistus laurifolius*. Kew.
52. **Phoma Robergeana**, Sacc. *Syll.* 524.  
On *Staphylea pinnata*. Kew.

53. **Phoma staphyleæ**, Cooke. Grev. XIV., 2.  
On *Staphylea pennata*, &c. Kew.
54. **Phoma ophites**, Sacc. Syll. 527.  
On *Hibiscus syriacus*. Kew.
55. **Phoma exul**, Sacc. Syll. 528.  
On *Maclura aurantiaca*. Kew.
56. **Phoma loti**, Cooke. Grev. XIV., 2.  
On *Diospyros lotus*. Kew.
57. **Phoma tecomæ**, Sacc. Syll. 536.  
On *Tecoma radicans*. Kew.
58. **Phoma radicantis**, Cooke. Grev. XIII., 92.  
On living *Tecoma radicans*. Kew.
59. **Phoma platanoides**, Cooke. Grev. XIII., 93.  
On *Acer pseudoplatanus*. Kew.
60. **Phoma Lebiseyi**, Sacc. Syll. 541.  
On *Negundo aceroides*. Kew.
61. **Phoma velata**, Sacc. Syll. 542.  
On *Tilia europaea*. Kew; Highgate; Blackheath.
62. **Phoma paulowniae**, Thum. Sacc. Syll. 545.  
On *Paulownia imperialis*. Kew.
63. **Phoma tamaricella**, Sacc. Syll. 551.  
On *Tamarix*. Kew; Walmer.
64. **Phoma tamarisci**, Mont. Sacc. Syll. 553.  
On *Tamarix gallica*. Kew.
65. **Phoma elæagnella**, Cooke. Grev. XIV., 4.  
On *Elæagnus*. Kew.
66. **Phoma hapalocystis**, Sacc. Syll. 554.  
On *Platanus*. Kew.
67. **Phoma nothum**, Berk. Sacc. Syll. 556.  
On *Platanus*. Near Bristol.
68. **Phoma radula**, B. & Br. Sacc. Syll. 557.  
On *Platanus*. Batheaston.
69. **Phoma moricola**, Sacc. Syll. 564.  
On *Morus nigra*. Kew.
70. **Phoma crassipes**, Cooke. Grev. XIV., 2.  
On *Broussonetia papyrifera*. Kew.
71. **Phoma cinerescens**, Sacc. Syll. 567.  
On *Ficus carica*. Kew; Highgate.
72. **Phoma juglandina**, Sacc. Syll. 568.  
On *Juglans regia*. Kew.
73. **Phoma queruccella**, Sacc. & Roum. Sacc. Syll. 569.  
On *Quercus coccinea*. Kew.
74. **Phoma salicina**, West. Sacc. Syll. 578.  
On *Salix*. Kew.
75. **Phoma ligustrina**, Sacc. Syll. 580.  
On *Ligustrum*. Regent's Park.
76. **Phoma mutica**, B. & Br. Sacc. Syll. 581.  
On *Alnus glutinosa*.

77. **Phoma oppilata**, Fries. *Sacc. Syll.* 585.  
On *Betula*. Kew.
78. **Phoma eres**, Sacc. *Syll.* 586.  
On *Ulmus*. Kew ; Hampstead.
79. **Phoma planiuscula**, Sacc. *Syll.* 587.  
On *Robinia pseudacacia*. Swanscombe.  
On *Ulmus campestris*. Kew ; Highgate.
80. **Phoma celtidis**, Cooke. *Grev. XIV.*, 3.  
On *Celtis occidentalis*. Kew.

## B. FOLIICOLÆ.

81. **Phoma parca**, B. & Br. *Sacc. Syll.* 592.  
On leaves of *Abies excelsa*. Batheaston.
82. **Phoma strobi**, B. & Br. *Sacc. Syll.* 603.  
On leaves and cones of *Pinus strobus*. Glamis ; Spye Park.
83. **Phoma geniculata**, B. & Br. *Sacc. Syll.* 604.  
On leaves of *Pinus strobus*. Spye Park ; Menmuir.
- 83\* **Phoma thujana**, Thum. *Sacc. Syll.*, 605.  
On leaves and twigs of *Thuja*. Lyndhurst.
84. **Phoma taxi**, Berk. *Sacc. Syll.* 606.  
On leaves of *Taxus baccata*. Forden (F.B. i. 529.)
- 84\* **Phoma hysterella** *Sacc. Syll.*, 607.  
On leaves of *Taxus baccata*. Hampton in Arden (W. B. Grove.)
85. **Phoma petiolorum**, Desm. *Sacc. Syl.* 611.  
On petioles of *Robina*. Dartford.
86. **Phoma leucostigma**, Lev. *Sacc. Syll.* 623.  
On leaves of *Hedera* and *Buxus*. Kew.
87. **Phoma Candollei**, B. & Br. *Sacc. Syll.* 624.  
On leaves of *Buxus*. Swanscombe (F.B. i. 159.)
- 87\* **Phoma Mirbelii**, Fr. *Sacc. Syll.*, 625, including *P. delitescens*, Wallr.  
*Sacc. Syll.*, 626.  
On leaves of Box. Kent ; Hampton in Arden (W. B. G.)
- 87\* **Phoma ilicicola**, C. & E., *Sacc. Syll.*, 629.  
On holly leaves. Hampton in Arden (W. B. G.)
88. **Phoma sorbi**, Lasch. *Sacc. Syll.* 634.  
On leaves of *S. aucuparia*. Highgate (F.B. i. 128) ; Shere ; Lancashire ; Tay ; Ross ; (N.B.)
89. **Phoma collabens**, Cooke. *Grev. XIII.* 94.  
On living leaves of *Prunus lusitanica*. Kew.
90. **Phoma piceata**, B. & Br. *Sacc. Syll.* 638.  
On rose leaves. King's Cliff.
91. **Phoma rhodoraæ**, Cooke. *Grev. XIV.*, 3.  
On *Rhododendron* leaves. Kew.
92. **Phoma subnervisequum**, Desm. *Sacc. Syll.* 670.  
On *Lathyrus*. (Rev. T. Salwey.)
93. **Phoma cylindrospora**, Desm. *Sacc. Syll.* 671.  
On leaves and petioles of Ivy. Forfarshire.

94. **Phoma Ralfsii**, B. & Br. *Sacc. Syll.* 672.  
On leaves of *Hedera helix*. Aberystwyth.
95. **Phoma visci**, *Sacc. Syll.* 673.  
On Mistletoe.
96. **Phoma dispersa**, *Cooke. Grev. XIII.*, 93.  
On leaves of *Platanus*. Kew.
97. **Phoma aucubæ**, West. *Sacc. Syll.* 684.  
On leaves of *Aucuba*. Highgate ; Kew.  
= var. *ramealis*.  
On twigs of *Aucuba*. (Rev. J. E. Vize.)
98. **Phoma mahoniæ**, Thum. *Sacc. Syll.* 695.  
On leaves of *Mahonia*. Kew.

## 2. On Herbaceous Dicotyledons.

### A. CAULICOLÆ.

99. **Phoma vulgaris**, *Sacc. Syll.* 707.  
On twigs of *Clematis vitalba*. Kew ; Dartford.
100. **Phoma lingam**, Tode. *Sacc. Syll.* 709.  
On Cabbage stalks. Hampstead ; Kew.
101. **Phoma caryophylli**, Cooke. *Grev. XIII.* 94.  
On stems and calyces of cultivated Pinks. Shrewsbury.
102. **Phoma phaseoli**, Desm. *Sacc. Syll.* 717.  
On stems of *Phaseolus*. Highgate.
103. **Phoma alcearum**, Cooke. *Grev. XIII.*, 94.  
On Hollyhock. Kew.
104. **Phoma malvacearum**, West. *Sacc. Syll.* 729.  
On *Malva*. Kew ; Hendon ; Leatherhead.
105. **Phoma arctii**, Lasch. *Sacc. Syll.* 731.  
On *Lappa*. Kew ; Dartford ; Highgate.
106. **Phoma dipsaci**, Cooke. *Grev. XIII.* 94.  
On *Dipsacus sylvestris*. Kew.
107. **Phoma albicans**, Desm. *Sacc. Syll.* 734.  
On peduncles of *Compositæ*. Tottenham.
108. **Phoma achilleæ**, *Sacc. Syll.* 738.  
On *Achillea millefolia*. Kew.
109. **Phoma solidaginis**, Cooke. *Grev. XIII.* 94.  
On *Solidago*. Kew ; Whitehall.
110. **Phoma dahliæ**, Berk. *Sacc. Syll.* 1015.  
On *Dahlia*. Kew ; King's Cliffe.
111. **Phoma longissima**, Fries. *Sacc. Syll.* 748.  
On stems of *Umbelliferæ*. Berwick.
112. **Phoma complanata**, Pers. *Sacc. Syll.* 751.  
On herb stems. Highgate ; Darenth.
113. **Phoma asteriscus**, Berk. *Sacc. Syll.* 753.  
On *Heracleum*. Highgate ; Thirsk ; Jedburgh.
114. **Phoma rubella**, Cooke. *Grev. XIV.*, 3.  
On stems of *Umbelliferæ*. Kew.

115. **Phoma projecta**, Cooke. *Sacc. Syll.* 755.  
On *Heracleum*. Mickleham ; Swanscombe.
116. **Phoma lycopersici**, Cooke. *Grev.* xiii., 94.  
On stems of Tomato. Forden (Rev. J. E. Vize.)
117. **Phoma dulcamaræ**, Sacc. *Syll.* 759.  
On *Solanum dulcamara*. Kew.
118. **Phoma tatulæ**, Cooke. *Sacc. Syll.* 762.  
On *Datura stramonium*. Kew.
119. **Phoma nitidula**, Sacc. *Syll.* 766.  
On *Scrophularia*. Neatishead (Norfolk).
120. **Phoma errabunda**, Desm. *Sacc. Syll.* 767.  
On *Verbascum*. Darenth (F.B. I. 619).
121. **Phoma polemonii**, Cooke. *Grev.* xiii., 94.  
On *Polemonium cæruleum*. Kew.
122. **Phoma labiatarum**, Cooke. *Grev.* xiii., 94.  
On *Marrubium*. Kew.
123. **Phoma devastatrix**, B. & Br. *Sacc. Syll.* 791.  
On *Lobelia*. Shrublands.
124. **Phoma spiræa**, Desm. *Sacc. Syll.* 792.  
On *Spiræa ulmaria*. Kew ; Tottenham ; Irstead.
125. **Phoma herbarum**, West. *Sacc. Syll.* 793.  
On *Digitalis*. Kew.  
On *Ruta*. Regent's Park.  
On petioles of *Catalpa*. Highgate.  
On *Malva*. Kew ; Swanscombe.  
On *Aristolochia siphon*. Kew.  
On *Menispermum*. Kew.
126. **Phoma acuta**, Fries. *Sacc. Syll.* 794.  
On *Urtica* and *Ballota*. Hampstead.
127. **Phoma exigua**, Desm. *Sacc. Syll.* 797.  
On *Ranunculus*. Abridge ; Hendon.
128. **Phoma polygonorum**, Cooke. *Grev.* xiv., 3.  
On *Polygonum cuspidatum*. Kew.
129. **Phoma onagracearum**, Cooke. *Grev.* xiii., 95.  
On *Epilobium angustifolium*. Kew.  
On *Oenothera biennis*. Kew.
130. **Phoma nebulosa**, Pers. *Sacc. Syll.* 801.  
On *Urtica*. Shere (F.B. I., 621), Thirsk ; Berwick ; Edinburgh ; Norfolk.
131. **Phoma subordinaria**, Desm. *Sacc. Syll.* 805.  
On *Plantago*. King's Lynn (F.B. I., 617. ; II., 13.).
132. **Phoma oleracea**, Sacc. *Syll.* 802.  
On *Erysimum alliaria*, *Sisymbrium austriacum*. Kew.
133. **Phoma sarmenticia**, Sacc. *Syll.* 807.  
On *Menispermum canadense*. Kew.  
On *Cocculus carolinianus*. Kew.
134. **Phoma calystegiæ**, Cooke. *Grev.* xiii., 94.  
On *Calystegia sepium*. Kew.

135. **Phoma cacti**, Berk. *Sacc. Syll.* 817.  
On *Cactus*. Highgate.
136. **Phoma lirella**, Desm. *Sacc. Syll.* 824.  
On stems of *Vinca*. Swanscombe.
137. **Phoma Durandiana**, Sacc. & Roum. *Sacc. Syll.* 828.  
On *Rumex*. Kew ; Totteridge ; Dartford.
138. **Phoma lysimachiæ**, Cooke. *Grev. XIII.*, 94.  
On *Lysimachia vulgaris*. Kew.
139. **Phoma superflua**, Sacc. *Syll.* 826.  
On *Scabiosa*. Aberdeen.

#### B. FOLIICOLÆ.

140. **Phoma vincæ**, Curr. *Sacc. Syll.* 862.  
On leaves of *Vinca*. Bungay.

#### 3. On Fruits and Flowers of Dicotyledons.

141. **Phoma leguminum**, West. *Sacc. Syll.* 870.  
On various legumes. Forden (F.B. II., 414) ; Hampstead.
142. **Phoma capsularum**, Cooke. *Sacc. Syll.* 874.  
On pods of *Robinia*, &c. Highgate.
- 142\*. **Phoma lineolata**, Desm. *Sacc. Syll.* 896.  
On scales of Larch. Hampton in Arden (W. B. G.)
143. **Phoma glandicola**, Desm. *Sacc. Syll.* 900.  
On acorns. Kew ; Hampstead ; Dartford.
144. **Phoma samarorum**, Desm. *Sacc. Syll.* 911.  
On samara of *Fraxinus*. Highgate (F.B. I. 160) ; Thirsk ;  
Hampstead (F.B. II., 15) ; Fern, N.B. ; Norfolk ; Kew ;  
Shere ; Dartford ; Shrewsbury.
145. **Phoma morphæa**, Sacc. *Syll.* 916.  
On capsules and stems of *Papaver somniferum*. Kew.
146. **Phoma eriophorum**, B. & Br. *Sacc. Syll.* 919.  
On chestnuts. Batheaston.

#### 4. On Monocotyledons.

147. **Phoma chamæropis**, Cooke, *Grev.*, XIII., 95.  
On palm petioles. Kew.
148. **Phoma tamicola**, Cooke, *Grev.*, XIII., 95.  
On stems of *Tamus*.
149. **Phoma microscopicum**, B. & Br. *Sacc., Syll.*, 948.  
On stems of *Potamogeton*.
150. **Phoma acori**, Cooke, *Grev.*, XIII., 95.  
On *Acorus calamus*. Kew ; Totteridge.
151. **Phoma asparagi**, Sacc. *Syll.* 966.  
On stems of *Asparagus*. Hampstead.
152. **Phoma rusci**, Sacc. *Syll.* 968.  
On stems and phyllodes of *Ruscus*. Kew.
153. **Phoma arundinacea**, Lev. *Sacc. Syll.* 983.  
On reeds.

154. **Phoma typharum**, Fckl. Sacc. Syll. 987.

On *Typha*. Kew.

5. *On Cryptogamia.*

155. **Phoma epitricha**, B. & Br. Sacc. Syll. 1005.

On *Equisetum*. Pitsligo.

6. *On Miscellaneous Substances.*

156. **Phoma chartarum**, B. & C. Sacc. Syll. 1008.

On paper. London.

**GEN. 2. APOSPHÆRIA**, Sacc. (not B. & Br.).

Perithecia globose, papillate, subcarbonaceous, superficial, or with the base sunk into the matrix. Sporules ovoid, oblong, or almost spherical, continuous, hyaline; basidia absent or very short, mostly growing on wood.

157. **Aposphæria epileuca** (Berk.), Sacc. Syll. 1018.

On pine planks. Woodnewton.

158. **Aposphæria bicuspidata** (Berk.), Sacc. Syll. 1026.

On pine planks. Woodnewton.

159. **Aposphæria inophila** (Berk.), Sacc. Syll. 1050.

On maple planks. King's Cliffe.

160. **Aposphæria ulmicola** (Berk.), Sacc. Syll. 1053.

On elm planks. King's Cliffe.

161. **Aposphæria mucifera** (Berk.), Sacc. Syll. 1054.

On elm planks. King's Cliffe.

162. **Aposphæria glomerata**, Corda, Sacc. Syll. 1055.

On elm chips. King's Cliffe.

163. **Aposphæria fibricola** (Berk.), Sacc. Syll. 1058.

On oak, ash, elm and poplar wood. Forden, King's Cliffe.

**GEN. 3. DENDROPHOMA**, Sacc. Syll. III., 178.

Perithecia subcutaneous, rarely superficial, subglobose, papillate, between membranaceous and carbonaceous, naked. Sporules oblong, ovoid or allantoid, hyaline. Basidia branched, often in a verticillate manner.

164. **Dendrophoma pruinosa**, Fr. Sacc. Syll. 1077.

On branches of *Fraxinus*. Twycross.

**GEN. 4. NEOTTIOSPORA**, Desm., Sacc. Syll. III. 206.

Perithecia wholly immersed, spherical, membranaceous, opening by a round or irregular pore. Sporules oblong-fusoid, with a tuft of setæ at the apex, continuous, hyaline.

165. **Neottiospora caricum**, Desm. Sacc. Syll. 1294.

On dead *Carices*. Rudloe (Wilts). Batheaston; Moray.

GEN. 5. **CONIOTHYRIUM**, *Corda.* *Sacc. Syll.* III., 305.

Perithecia subcutaneous, erumpent, or somewhat superficial, globose or depressed, papillate, membranaceous or rather carbonaceous. Sporules globose or ellipsoid, small, continuous, diaphanous, slightly coloured; basidia short, simple, or obsolete.

166. **Coniothyrium hederæ**, *Desm.* *Sacc. Syll.* 1728.  
On leaves and twigs of ivy. King's Cliffe.
167. **Coniothyrium cassiæcolum**, *Cooke.* *Grev.* XIII., 96.  
On stems of *Cassia Marylandica*. Kew.
168. **Coniothyrium sphærospermum**, *Fckl.* *Sacc. Syll.* 1733,  
On *Ulex*. New Forest.
169. **Coniothyrium concentricum**, *Desm.* *Sacc. Syll.* 1789.  
On leaves of *Yucca*. King's Lynn; Oswestry; Kew; Northamptonshire.

GEN. 6. **RHABDOSPORA**, *Mont.* *Sacc. Syll.* III., 578.

Perithecia sub-cuticular, erumpent, globose, or depressed, typically papillate, sometimes hysteriform. Sporules rod-shaped or thread-like, multiguttulate, or pseudo-septate, hyaline.

170. **Rhabdospora ramealis**, *Desm.* *Sacc. Syll.* 3151.  
On bramble twigs. Barnet.
171. **Rhabdospora Muggenbergii**, *Sace. Syll.* 3155.  
On branches of *Vitis vinifera*. Kew.
172. **Rhabdospora salicella**, *B. & Br.* *Sacc. Syll.* 3176.  
On branches of *Salix*. Penzance.
173. **Rhabdospora lituus**, *B. & Br.* *Sacc. Syll.* 3183.  
On branches. Penzance.
174. **Rhabdospora fibriseda**, *Berk.* *Sacc. Syll.* 3186.  
On birch wood. King's Cliffe.

GEN. 7. **DILOPHOSPORA**, *Desm.* *Sacc. Syll.* III., 600.

Perithecia globose, pierced, often immersed in a crustaceous stroma. Sporules cylindrical, continuous, hyaline, ornamented with a tuft of setæ at each extremity.

175. **Dilophospora graminis**, *Desm.* *Sacc. Syll.* 3261.  
On wheat and grasses. Ely; Kidbrooke; King's Cliffe.

*Sub-Fam. II. SPHÆRONEMÆ.*

Perithecia naked, distinctly rostellate; sporules for the most part continuous, and hyaline.

GEN. 1. **SPHÆRONEMA**, *Fr.* *Sacc. Syll.* III., 185.

Perithecia membranaceous, coriaceous or carbonaceous, inuate or superficial, globose, with a more or less subulate ostiolum. Sporules ovoid or oblong, continuous, subhyaline, forming when expelled a globule at the apex of the ostiolum.

175. \***Sphæronema æmulans**, B. & Br. *Sacc. Syll.* 1160.  
On wood. Epping Forest.
176. **Sphæronema deformans**, Berk. *Sacc. Syll.* 1167.  
On leaves of *Eranthemum pulchellum*.
177. **Sphæronema epimyces**, Berk. *Sacc. Syll.* 1176.  
On *Corticium comedens*.

**GEN. 2. CICINNOBOLUS**, Ehr. *Sacc. Syll.* III. 216.

Perithecia small, conical, oblong, or somewhat pear-shaped, membranaceous, ochre-brown, pierced at the apex, parasitic amongst the threads of *Oidium*. Sporules ovoid, continuous, hyaline, expelled in a long tendril.

178. **Cicinnobolus cesatii**, DBary. *Sacc. Syll.* 1293.  
Parasitic on *Oidium erysiphoides*.

This sub-family includes also the genera—

Rhynchophoma, Karst. *Sacc. Syll.* III., 414.

Sphærographium, *Sacc. Syll.* III., 596.

Cornularia, Karst. *Sacc. Syll.* III., 598,  
but we know of no British species.

*Sub-Fam. III. VERMICULARIÆ, Fr.*

Perithecia tomentose, villous, or clad with hairs, bristles, spines, or hair-like processes. Sporules chiefly continuous and hyaline.

**GEN. 1. VERMICULARIA**, Fr. *Sacc. Syll.* III., 221.

Perithecia erumpent or subsuperficial, membranaceo-carbonaceous, black, globose or conical, at length often concave, pierced at the apex, or astomous, clothed with rather long, rigid, septate dark-coloured bristles. Sporules cylindrical, fusiform, often unequal-sided, continuous, hyaline.

179. **Vermicularia trichella**, Fr. *Sacc. Syll.* 1329.  
On ivy leaves. Stratford-on-Avon ; Highgate ; Dartford.
180. **Vermicularia dematum**, Fr. *Sacc. Syll.* 1336.  
On herbaceous stems. Twycross ; King's Cliffe ; Darenth. (F. B. II., 116.)
181. **Vermicularia eryngii**, Desm. *Sacc. Syll.* 1342.  
On *Eryngium*. Fleetwood.
182. **Vermicularia atramentaria**, B. & Br. *Sacc. Syll.* 1345.  
On potato stems. Forden.
183. **Vermicularia circinans**, Berk. *Sacc. Syll.* 1376.  
On onions.
184. **Vermicularia liliacearum**, West. *Sacc. Syll.* 1374.  
On *Scilla nutans* and *Convallaria*.
- This sub-family includes also the genera *Muricularia*, *Staurochæta*, *Pyrenochæta*, and *Chætomella*.

## Sub-Fam. IV. DIPLODIÆ.

Perithecia submembranaceous or carbonaceous, naked. Sporules uniseptate (rarely continuous), coloured (except in *Diplodina*.)

GEN. 1. **SPHÆROPSIS**, Lev. Sacc. Syll. III., 291.

Perithecia subcutaneous, erumpent, globose, papillate, between membranaceous and carbonaceous, black. Sporules ovoid or oblong, continuous, smoky-brown; basidia filiform.

185. **Sphæropsis visci**, Sollm. Sacc. Syll. 1659.

On leaves and twigs of mistletoe.

186. **Sphæropsis pinastri**, Lev. Sacc. Syll. 1692.

On leaves and cones of *Pinus sylvestris*. Eastbourne.

GEN. 2. **HAPLOSPORELLA**, Speg. Sacc. Syll. III., 323.

Perithecia cæspitose, erumpent, black, subcarbonaceous, papillate, or immersed in a verruciform stroma. Sporules as in *Sphæropsis*.

187. **Haplosporella cæspitosa**, B. & Br. Sacc. Syll. 1815.

On ivy twigs. King's Cliffe.

188. **Haplosporella melogrammata**, Cooke in Vize's Exs. No. 104.

On bark. Forden.

GEN. 3. **DIPLODIA**, Fr. Sacc. Syll. III., 329.

Perithecia subcutaneous, erumpent, somewhat carbonaceous, black, typically papillate, pierced. Sporules ellipsoid, ovoid, or oblong, uniseptate, brown. Basidia simple, rod-like, hyaline.

## A. On woody Dicotyledons.

\* On branches.

189. **Diplodia tiliæ**, Fckl. Sacc. Syll. 1829.

On lime branches. Blackheath.

190. **Diplodia subtecta**, Fr. Sacc. Syll. 1834.

On maple branches. Northamptonshire.

191. **Diplodia atrata**, Desm. Sacc. Syll. 1835.

On *Negundo aceroides*. Kew.

192. **Diplodia aesculi**, Lev. Sacc. Syll. 1837.

On horse chestnut. Jedburgh.

193. **Diplodia viticola**, Desm. Sacc. Syll. 1841.

On vine twigs. King's Cliffe.

194. **Diplodia ramulicola**, Desm. Sacc. Syll. 1846.

On *Euonymus europaeus*.

195. **Diplodia ilicicola**, Desm. Sacc. Syll. 1848.

On holly. Highgate (F. B. I., 449); Forden; Milton.

196. **Diplodia genistarum**, Cooke. Grev. XIII., 96.

On *Genista ætnensis*, and *Coronilla*. Kew.

197. **Diplodia profusa**, De Not. Sacc. Syll. 1861.

On *Robinia pseudacacia*.

198. **Diplodia sarothamni**, Cke. & Hk. Sacc. Syll. 1870.

On *Sarothamnus*. Swanscombe.

# Grevillea,

A QUARTERLY RECORD OF CRYPTOGAMIC BOTANY  
AND ITS LITERATURE.

## NEW BRITISH FUNGI.

By M. C. COOKE.

(Continued from p. 7.)

**Agaricus (Pluteus) pellitus, Pers. Syn.** 366.

*White.* Pileus rather fleshy, convex, then plane, even, dry, *silky*. Stem stuffed, smooth, even, shining. Gills flesh-coloured.—*Fr. Hym. Eur.* 187: *Cooke Illus.* t. 597.

On trunks and on the ground about them. Scarboro' (G. Massee). Pileus 2 in. broad. Stem 2 in. long, 2-3 lines thick.

**Agaricus (Pluteus) roseo-albus, Fr. Hym. Eur.** 188.

Pileus rather fleshy, convex, then expanded, even, smooth, *roseay*, margin naked. Stem solid, attenuated, *pruinose with white*; gills free, rather distant, flesh-coloured.—*Flora Danica*, t. 1679. *Cooke Illus.* t. 598.

On elm trunk. Burghill Court, Herefordshire.

Pileus 3 in. broad. Stem 2-3 in. long,  $\frac{1}{2}$  in. thick, commonly curved and ascending.

**Agaricus (Flammula) ochrochlorus, Fr. Hym. Eur.** 252.

*Cæspitose.* Pileus fleshy, convex then plane, obtusely umbonate, *dry, minutely silky*, rather squamulose, *greenish straw-colour*, stem hollow, squamose, clad with white flocci, flexuous, at the base and within ferruginous; gills adnate, crowded, whitish then greenish, at length olivaceous.

On old trunks. Scarboro' (G. Massee).

Size and habit of *Ag. fascicularis*, but spores pure ferruginous.

**Agaricus (Stropharia) luteo-nitens, Fr. Hym. Eur.** 286.

Pileus fleshy, thin, conical-campanulate, umbonate, viscid, yellow, margin squamulose, stem *hollow, even*, pruinose above the distant ring, gills adnexed, ventricose, cinereous, becoming blackish.—*Flora Danica*, t. 1067. *Cooke Illus.* t. 604.

On sawdust, dung, and humus. Crackley Wood, Kenilworth.

Pileus 1-2 in. Stem 2 in. long, 2 lines thick.

**Agaricus (Stropharia) hypsipus, Fr. Hym. Eur. 290.**

Pileus convex, then plane, even, smooth, hygrophanous; stem hollow, equal, smooth, ring medial, persistent, gills adnate, seceding, rather distant; white, then brown.—*Fr. Icon. t. 132, f. 2. Cooke Illus. ined.*

Solitary in swampy places. Scarboro' (G. Massee).

Fragile. Stem 3-4 in. long, 2-3 lines thick. Pileus 2 in. broad, striate at the margin, tan-coloured or pallid when dry.

**Cortinarius (Phlegm.) talus, Fr. Hym. Eur. 344.**

Pileus fleshy, convex, equal, even, smooth, viscid; stem solid, equal, cylindrical, rather smooth, marginate-bulbous at the base, as well as the flesh growing pallid; gills emarginate, rather crowded, ochraceous straw-colour (scarcely discoloured).—*Fr. Icon. t. 145, f. 2.*

In woods. Epping Forest.

Pileus 2 in. or a little more, opaque in colour. Stem 3 in. long,  $\frac{1}{2}$  in. thick.

**Cortinarius (Phlegm.) decolorans, Fr. Hym. Eur. 351.**

Pileus fleshy, equal, expanded, even, smooth, viscid, of one colour; stem stuffed, elongated, attenuated, smooth, naked above the somewhat persistent median ring, and as well as the flesh white; gills affixed, thin, without juice, purplish, soon becoming cinnamon.

In fir woods. Epping forest.

Pileus yellow,  $1\frac{1}{2}$ - $2\frac{1}{2}$  in. Stem 2-3 in. long, 3-4 lines thick.

**Cortinarius (Incoloma) argentatus, Fr. Hym. Eur. 360.**

Pileus fleshy, convex, becoming smooth, shining silvery-grey, disc rather gibbous, becoming pallid, about the margin at first silky-lilac, then growing whitish; stem stout, white, of the same colour within; gills emarginate, crowded, serrate, pale, then watery cinnamon.

In woods. Epping Forest.

Pileus as much as 4 in. broad. Stem 4 in. long, or abbreviated. A smaller and more slender form is found in pine woods.

**Cortinarius (Telamonia) triformis, Fr. Hym. Eur. 382.**

var. *Schæfferi*, Fries. Mon. Hym. II., 73.

Pileus fleshy, convex, then plane, somewhat umbonate, fibrillose or becoming smooth, opaque, tawny, then yellowish, hygrophanous, margin thin; stem stuffed, clavate, becoming smooth, pallid, spongy within, ring white, gills somewhat adnate, rather crowded, yellowish honey-colour, at length pale cinnamon.

In woods. Alresford, Hants (Rev. W. L. Eyre).

Pileus 2-3 in. broad. Stem 3 in. long,  $\frac{1}{2}$  in. thick.

**Cortinarius (Hydrocybe) privignus, Fr. Hym. Eur. 388.**

Pileus fleshy, thin, convex then plane, gibbous, even, pale tawny, smooth, or with a fibrillose adpressed hoary silvery bloom; stem stuffed, then hollow, rather attenuated, silvery, here and there silky with the white veil, gills adnate, somewhat crowded, watery, then opaque cinnamon, edge serrate, white.

In pine woods. Woolhope Foray, 1885.

Pileus 2 in. broad. Stem 3 in. long, 3 lines thick, equal or contorted

**Cortinarius (Hydrocybe) saturninus, Fr. Hym. Eur. 390.**

Pileus fleshy, thin, campanulate, then expanded, smooth, moist, dark bay, (testaceous), becoming discoloured, *silky at the margin*, with the white fibrillose veil; stem stuffed, even, *violet*, incrassated at the base, gills adnexed, thin, crowded, purplish then watery cinnamon.

In grassy places. Woolhope Foray, 1885.

Pileus 2-3 in. broad. Stem 2-3 in. long,  $\frac{1}{2}$ -1 in. thick, gills broad, reaching to 4 lines.

**Aecidium zonale, Breb. in Duby. Bot. Gal. 906.**

Hypophylloous. Spots purple-brown and yellow zoned, pseudo-peridia collected in suborbicular tufts, annulately and circinate disposed, cup-shaped, pallid yellow, mouth rather denticulate, somewhat reflexed; spores pale yellow.

On *Inula dysenterica*. Totland Bay, Isle of Wight (H. P. Fitzgerald).

**Puccinia gentianæ (Strauss). Link. Sp. II., 73.**

Uredo-form—*Uredogentianæ* (Strauss) D.C. Fl. Fr. vi., 64.

Teleutospores—*Puccinia gentianæ*, Link.

Spots obliterated, sori subrotund, variable in size, scattered, amphigenous; spores umber.—W. G. Smith, in *Gard. Chron.*, 1885.

On *Gentiana acaulis*. Kew. Aug., 1885.

**Puccinia silai, Fckl. Symb. p. 53. Fungi Rhen. 360. Thum. Myc. Univ., No. 235.**

Uredospores and teleutospores intermixed. Spots obliterated. Sori oval or subrotund on both surfaces, surrounded by the ruptured cuticle, dark brown. Spores umber.

On *Silans pratensis*. Pontrilas.

Referred by Dr. Winter to *Puccinia bullata*.

**Phyllosticta sidæcola, Cooke.**

Epiphyllous. Spots brown, indistinct, becoming pallid in the centre, irregular or confluent; perithecia punctiform, membranaceous, brown, minute. Sporules elliptical, enucleate, hyaline, ( $\cdot004 \times \cdot002$  mm.).

On fading leaves of *Sida napæa*. Kew.

**Phyllosticta aizoon, Cooke.**

Epiphyllous. Spots small, suborbicular, brown, with a darker margin. Perithecia minute, membranaceous, brown, immersed. Sporules elliptic, continuous, hyaline,  $\cdot003 \times \cdot0015$  mm.

On leaves of *Sedum aizoon*. Kew.

**Phyllosticta potamia, Cooke.**

Spots pale ochraceous, becoming brownish, without any distinct margin. Perithecia chiefly on the under surface, punctiform, black, somewhat protuberant and shining. Conidia elliptical, hyaline ( $\cdot01 \cdot012 \times \cdot003$  mm.).

On leaves of *Potamogeton*. Lyndhurst, Hants; Epping Forest.

**Phyllosticta Bolleana, Thum. Sacc. Syll. 620.**

In our opinion this is certainly a *Phyllosticta*, and not a *Phoma*.

On leaves of *Hoya carnosa*. Neatishead.

**Asteroma solidaginis, Cooke.**

Perithecia minute, collected in dark suborbicular patches, seated on a delicate brown reticulate cuticular mycelium, which is more or less radiating. Sporules elliptical, minute, hyaline, continuous.

On fading leaves of *Solidago elliptica*. Kew.

**Septoria primulae, Bucknall.**

Epiphyllous. Spots pallid, orbicular, with a brown margin, scattered. Perithecia few, punctiform, semi-immersed, black, seated in the centre of the pallid spots. Sporules linear, straight, hyaline, ·047 mm. long.

On leaves of Primrose. Leigh Wood (C. B.).

**Cladosporium Kniphofiae, Cooke.**

Amphigenous, olivaceous, cæspitose. Tufts small, gregarious or confluent, velvety. Hyphae simple, erect, flexuous, confluent at the base in fascicles, amber coloured. Septæ rather short, nodulose. Conidia normally uniseptate, ultimately often with two or three septa, twice the diameter of the hyphae, elliptical, ·025-·03 × ·01 mm., pale olive.

On dead leaves of *Kniphofia aloides*. Kew.

It is somewhat difficult to determine the limits of species in this genus, but the present seems to have a definite character.

**Ramularia scelerata, Cooke.**

Spots elongated, brownish, soon occupying the greater part of the leaf. Hyphae short, scattered, mostly on the under surface. Conidia elliptico-cylindrical, rounded at the ends, granular, hyaline, ·02 × ·0035.

On radical leaves of *Ranunculus sceleratus*. Lyndhurst, Hants.

**Ramularia lychnicola, Cooke.**

Hypophyllous. Spots orbicular, ochraceous. Hyphae fasciculate, in small tufts, simple, short. Conidia elongated, elliptical, obtuse, continuous, hyaline, ·012-·015 × ·004 mm.

On leaves of *Lychnis diurna*. Lyndhurst.

**Ramularia lampsanæ, Desm.**

Threads tufted, simple or shortly branched (·30-·50 × ·3), continuous. Conidia fusoid (·01-·015 × ·0035-·004 mm.), hyaline, continuous, catenulate. *Sacc. Fungi Ital.* t. 995.

On living leaves of *Lampsana communis*. Basingstoke (H. P. Fitzgerald).

**Ramularia alnicola, Cke.**

Epiphyllous. Spots orbicular, glaucous-grey, at length fuliginous. Hyphae very short. Conidia elliptical, continuous, hyaline, sometimes concatenate, ·01-·014 × ·004.

On leaves of *Alnus glutinosa*. Lyndhurst, Hants.

**Ceratostoma (Ceratostomella) vestita, Sacc. Syll. No. 1550.**

Perithecia scattered, sub-superficial, globose ( $\frac{1}{3}$ - $\frac{1}{2}$  mm. diam.), clad with tortuous septate hairs. Ostiole cylindrical, naked, equal to the perithecia. Asci cylindrical, obtuse at the apex, shortly stipitate.

Sporidia uniserial, ellipsoid ( $\cdot006 \times \cdot0033\text{--}\cdot004$  mm.), often unequal sided, biguttulate, hyaline.

On rotten wood, probably oak. Mattishall, Norfolk (C. B.).

**Didymosphaeria conoidea**, Niessl. *Sacc. Syll.* 2644.

Perithecia scattered, covered, becoming free, rather large, conoid, flattened at the base, the apex sometimes a little depressed. Ostiola papillate or somewhat conical, black, shining, rather hard. Ascii cylindrical, with a short stem. Sporidia uniserial, obovate, septate at the middle, a little constricted, pale olivaceous ( $\cdot006\text{--}\cdot009 \times \cdot005$  mm.).

On herbaceous stems. Near Bristol (C. B.).

### ANNUAL FUNGUS FORAYS.

**ESSEX FIELD CLUB.**—This excursion, as last year, was extended over two days, October 2nd and 3rd—the foray for the first day being near Epping, and on the second day more in the neighbourhood of Loughton. It need not be said that the present is the worst year for fungi in our experience, owing to the dry summer succeeded by a cold autumn. Notwithstanding this, some interesting additions were made to the Epping Forest Flora. Of these we may enumerate—*Ag. (Coll.) confluens*, *Ag. (Pleur.) septicus*, *Ag. (Myc.) hæmatopus*, *Ag. (Crep.) mollis*, *Ag. (Ino.) eutheles*, *Ag. (Pan.) phalænarum*, *Cortinarius armillatus*, *Cortinarius talus*, *Cortinarius paleaceus*, *Marasmius erythropus*, *Boletus laricinus*, and *Clavaria contorta*, together with *Cortinarius decolorans*, and *Cortinarius evernius*. In the evening, after tea, a meeting was held, and several papers read.

**TUNBRIDGE WELLS NATURAL HISTORY SOCIETY.**—This Society had its first Fungus Foray this year in Buckhurst Park. The number of fungi collected was small, and these were afterwards exhibited in the rooms of the Literary Institution. Mr. Howse kindly forwarded a list of the principal species collected, none of which can be considered rare, and most of them the commonly and widely distributed species.

**HERTFORDSHIRE NATURAL HISTORY SOCIETY.**—The annual Fungus Foray and Cryptogamic Excursion took place on October 17th, in Bricket Wood, being, as heretofore, a Saturday half-day excursion. We have received no record of results.

**BIRMINGHAM NATURAL HISTORY SOCIETY.**—No regular mycological excursion was undertaken by this Society in the present autumn, but during a private excursion with two or three friends, in the neighbourhood of Kenilworth, we found *Agaricus (Stropharia) luteo-nitens*, Fr., for the first time in this country, of which figures will be given in the “Illustrations.”

WOOLHOPE CLUB.—The annual meetings commenced on the evening of October 5th, and closed on the 9th. The excursion on Tuesday was made to Pontrilas, where several interesting species of *Cortinarius* were found, as well as *Ag. (Trich.) guttatus*—the latter only once before recorded for Britain. Wednesday was occupied by an excursion to Dinmore, the most interesting species collected being *Cortinarius dibaphus*. On Thursday, being the Club Day, the Foray was somewhat limited in results. Friday excursion was made in Haywood Forest. The most interesting species found during the week were *Cortinarius saturninus*, *Cortinarius privignus*, and *Cortinarius infractus*. The attendance was not so good as usual, and the specimens collected much fewer in number than in preceding years. Several papers were read, and discussions promoted at the evening meetings. Though Dr. Bull was present as usual, it was generally noted that he seemed far from well, and but little characterized by his wonted vigour and enthusiasm. How very few then present dreamt of the possibility that they would never look upon his face again. As we write, under a feeling of sadness, we cannot help the conviction that the city of Hereford, and the Woolhope Club, have sustained a heavy and irreparable loss in the friend and fellow-labourer whose sudden departure we mourn.

HACKNEY NATURAL HISTORY SOCIETY.—The annual Fungus Excursion on October 24th was made, as usual, in Epping Forest, and although some of the party spent the whole day in the Forest, many did not arrive until the afternoon. The number of species recorded was a little in excess of the record of last year, but very little addition was made to the record of the flora of the Forest, the most noteworthy being *Agaricus squarrosus*, var. *verruculosus*, *Cortinarius argentatus*, *Cortinarius saturninus*, and *Russula vesca*. Here, as elsewhere, the paucity of species and individuals was clearly manifest. White-spored Agarics were particularly scarce, and even the ubiquitous *Agaricus melleus* had comparatively few representatives. *Fistulina hepatica*, *Hydnnum repandum*, and *Cantharellus cibarius* were not to be found at all.

LEICESTER NATURAL HISTORY SOCIETY.—The Botanical Section had their second annual Foray on Wednesday, October 28th, under much more favourable circumstances than last year. The number of species recorded was 116, of which a considerable number had not been previously recorded for Leicestershire; nothing particularly rare or novel was met with, although the locality was a promising one, and would probably yield very good results in a favourable season. In a note, advertizing to the Foray, Mr. Mott remarked: "I found yesterday a quantity of *Agaricus (Tricholoma) personatus* being sold at a little greengrocer's shop in a back street in Leicester. I have never known it to be used here before." This is the species which has been alluded to by many authors as having been sold under the name of "Blewits" in Covent Garden Market, but we have never seen a specimen offered for sale in any part of the Metropolis.

## FUNGI OF MALAYAN PENINSULA.

*Determined by M. C. COOKE.*

The following collection, in the Kew Herbarium, has been forwarded by Dr. King, of Calcutta :—

- Agaricus (Clitocybe) laccatus, *Scop.*, No. 1590.
- Agaricus (Collybia) raphanipes, *Berk.*, No. 6006.
- Xerotus lateritius, *B. & C.*, No. 3983.
- Panus aureo-fulvus, *Cooke*, No. 1893.
- Lentinus velutinus, *Fr.*, var. lamellis confertissimis, No. 2295.
- Lentinus brevipes, *Cooke*, No. 4342.
- Lentinus exilis, *Klotsch*, No. 2972.
- Lentinus sajor-caju, *Rumph.*, No. 2973.
- Lentinus subnudus, *Berk.*, No. 3976.
- Lentinus blepharodes, *Berk.*, No. 2988.
- Lentinus inquinans, *Berk.*
- Lentinus tener, *Klotsch*, No. 4388, 3202.
- Lentinus Beccarianus, *Ces.*, No. 3611, 3612.
- Lentinus pergamenus, *Lev.*, No. 2183, 2184.
- Lenzites deplanata, *Fr.*, No. 4727.
- Lenzites platyphyllus, *Cooke*, No. 4512.
- Polyporus (Petaloides) grammocephalus, *Berk.*, Nos. 3836, 2989,  
1107, 4134.
- "      "      var. Emerici, *Berk.*, No. 739, 3441 to  
                  3444.
- "      "      var. russiceps, *B.*, No. 4257.
- "      "      var. maculatus, *C.*, No. 3343.
- Polyporus (Petaloides) cochleariformis, *Cooke*, No. 2821.
- Polyporus (Lenti) alveolarius, *Fr.*, No. 4863.
- Polystictus (Discipedes) rigescens, *Cooke*, No. 4818.
- Fomes (Mesopodes) diabolicus, *B.*, No. 1947.
- Polystictus (Discipedes) Malaiensis, *Cooke*, No. 5398.
- Polystictus (Discipedes) microcyclus, *Zipp*, No. 910.
- Polyporus (Hispidi) chrysites, *Berk.*, No. 3837.
- Polystictus (Sacri) sacer, *Fr.*, No. 911. 1822.
- Polystictus (Sacri) xanthopus, *Fr.*, No. 1843.
- Polystictus (Discipedes) dilatatus, *Berk.*, No. 2799.
- Polystictus (Discipedes) discipes, *Berk.*, No. 3913, 4135.
- Polystictus (Coriacei) vinosus, *Berk.*, No. 2143.
- Polystictus (Coriacei) brunneopictus, *B.*, No. 5063.
- Polystictus (Coriacei) squamæformis, *B.*, No. 3682.
- Polystictus (Prolificantes) Nilgherrensis, *Mont.*, No. 2001.
- Polystictus (Prolificantes) elongatus, *B.*, No. 3665.
- Polystictus (Coriacei?) cupreo-roseus, *B.*, No. 1867.
- Polystictus latus, *Berk.*, No. 740.
- Trametes versatilis, *Berk.*, No. 4607, 1239.

- Trametes lobata, *Berk.*, No. 4600, 5774.  
 Trametes cingulatus, *Berk.*, No. 3088.  
 Dædalea Andamanni, *Berk.*, No. 4161.  
 Hexagona polygramma, *Mont.*, No. 1894.  
 Hexagona tenuis, *Hook.*, No. 3342.  
 Favolus tessulatus, *Mont.*, No. 1192.  
 Cyclomyces fuscus, *Kunze*, No. 4341.  
 Laschia tremellosa, *Fr.*, No. 3062.  
 Lachnocladium semivestitum, *B. & C.*, No. 4036.  
 Cladoderris dendritica, *Pers.*, No. 2166, 3133.  
 Stereum caperatum, *Berk.*, No. 943.  
 Stereum lobatum, *Kunze*, No. 4864, 2056.  
 Stereum spadiceum, *Fr.*, No. 3604.  
 Dictyonema sericea, *Sw.*, No. 1543.  
 Hymenochæte subpurpurascens, *Berk.*, No. 791.  
 Phallus dæmonum, *Rumph.*, No. 3550, 4037.  
 Scleroderma vulgare, *Fr.*, No. 4000.  
 Mitremyces coccineus, *Berk.*, No. 3838.  
 Meliola amphitricha, *Fr.*, No. 2595.  
 Peziza (Trichoscypha) tricholoma, *Mont.*, No. 2633.

Together with some incomplete and imperfect fungi not determinable.

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### VALSA VITIS, AGAIN.

By M. C. COOKE.

We have already attempted to clear up all doubts as to Schweinitz's *Sphæriae* of the Vine (*Grevillea* v, 125), and yet the confusion in Saccardo's *Sylloge* is as great as ever. We will make yet another attempt on the basis of authentic specimens from Schweinitz himself. Surely there can be no better authority.

**Diatrype (Valsaria) viticola, S. Sphæria viticola, Schwein. Syn. Car. p. 8, No. 64.**

“ Minor cum epidermide assurgens seriebus parallelis crescents griseo-nigra rugosa, sphærulis nigris, stromate brunneo.”

“ Rara in ramis emortuis *Vitis rotundifoliae*. Subpulvinata, sparsim nascens. Sphærulæ rariores due vel tres nigræ, in stromate brunneo splendente ; singulæ cortice nigro, valde crasso.” —Schwein. loc. cit. *Sphæria* (concrecentes) *viticola*, Schwein. *Syn. Amer. Bor.* No. 1290. *Diatrype viticola*, *Berk. & Curt. Amer. Fungi*. No. 854\*.

Sporidia oblong, elliptic, uniseptate, constricted slightly at the septum, .0006 in. long.—*Car. Inf.* No. 4975. *Herb. Berkeley.*

This we contend to be the *Sphæria viticola* (Schwein.); whether it is that of Montagne, we know not (see *Floræ d'Algérie*, pp. 463);

nor whether it is that of Saccardo's *Sylloge*, No. 2812. Since the diagnosis of the latter is so *amended* that it is not that of either Schweinitz or Montagne, whilst if the latter is supposed to be included, then the Algerian locality is not cited.

Under *Eutypa viticola* (Schw.), Saccardo, No. 669, quotes "Schwein. *Syn. Car.* No. 64, and *Mont. Fl. Alg.* p. 463, and *V. vitis* Schw. see Cooke *Valsei U.S.* p. 113." To this we object that the *Sph. viticola* of Schwein. *Syn. Car.* is not *Eutypa*, with hyaline allantoid sporidia, but, according to Schweinitz's own specimens, brown uniseptate sporidia (= *Valsaria*). And yet it may be the species of Montagne, who evidently confounded the *Sphaeria vitis* of Schweinitz with his *Sph. viticola*. Probably the species in view is the *Sphaeria vitis* of Schweinitz, and that of "Cooke *Valsei U.S.*" p. 113. But on what authority is Schweinitz's specific name of *vitis* changed to Montagne's *viticola*, only to confuse it with the *S. viticola* of Schweinitz.

The following is the *Sphaeria vitis* (Schw.):—

"*Circinata, minor nigra, sphærulis majusculis subtrinis coalitis librum elevantibus, ostiolis pulveraceis.*

"Rarior in junioribus ramis *Vitiæ* in libro, ubi decorticati sunt. Tres vel quatuor sphærulae majusculæ sub cortice interiori seu libro nidulant, corticem bullosum reddunt et in pustulam coalescent. Ostiola irregularia, subpulveracea, nigra."—*Syn. Car.* No. 117. *Syn. Amer. Bor.* No. 1362.

This is the *Valsa vitis*, Berk. and Curt. p. 171, under 869\*, which is entered twice in the North American Fungi as *Diatrype vitis* under 855\*, and as *Valsa vitis*, both of which refer to *Sphaeria vitis* (Schwein.), and to no other, and should stand as—

**Valsa (Eutypella) vitis** (Schwein.), probably *Eutypa viticola*, Sacc. Syll. No. 669, not the *Valsa vitis* (Schw.?) Sacc. Syll. No. 449.

There are two species represented by specimens from Schweinitz, and none other. One is *Diatrype (Valsaria) viticola*, with uniseptate brownish sporidia; the other is *Valsa (Eutypella) vitis*, with most distinctly sulcate ostiola, called by Schweinitz "irregularia, subpulveracea."

*Valsa vitis* (Schw.), Saccardo No. 449, is not the species of Schweinitz at all, as we have already pointed out, but *Valsa vitigera* (Cooke), and we challenge Professor Saccardo to produce his evidence that this species was ever known to Schweinitz at all. It does not exist in any collection of American Fungi which we have ever examined. It is not to be found amongst specimens from Schweinitz in the Kew Herbarium or the Berkeley Herbarium, or in specimens communicated by Dr. Curtis as the *Sphaeria vitis* of Schweinitz, and we feel fully entitled to call for the direct evidence that the *Valsa vitis* of Saccardo is in any part the *Valsa vitis* of Schweinitz, even if found in the North American Continent at all.

**Diatrype (Valsaria) viticola**, Schw. *Sphaeria viticola*, Schwein. *Syn. Car.* p. 8, No. 64. *Schwein. Amer. Bor.* No. 1290. *Diatrype viticola*, Berk. & Curt. *Amer. Fungi*, No. 854\*. *Herb. Berk.* No. 8781. *Valsaria viticola*, Sacc. Syll. No. 2812.

**Valsa (Eutypella) vitis** (*Schw.*) Sphaeria vitis, *Schwein. Syn. Car.* No. 117. *Schwein. Amer. Bor.* No. 1362. *Valsa vitis*, *Cooke Valsei U.S.* p. 113. *Berk. & Curt. Amer. Fungi* p. 171, No. 869\*. *Herb. Berk.* No. 8847. *Sphaeria viticola*, *Mont. Fl. Alg.* p. 463. *Eutypa viticola*, *Sacc. Syll.* No. 669. *Sphaeria propagata*, *Plow. Grev.* vii, 73. *Cryptosphaeria propagata*, *Sacc. Syll.* No. 687.

**Valsa vitigera**, *Cooke Grev.* v, p. 125. *Valsa vitis*, *Fekl. Symb. Myc.* 199. *Fungi. Rhen.* No. 607. *Sacc. Syll.* No. 449. *Sacc. Mycol. Ven.* p. 133, t. XIII, f. 19-21. *Myc. Ven.* No. 186.

## SYNOPSIS PYRENOMYCETUM.

*(Continued from p. 17.)*

1723. **Valsa (Eutypella) aleurina**, *B. & C. Herb. Berk.* 8925.

Pustulis convexis, orbicularibus, dense gregariis, erumpentibus, epidermide circum ostiola stellatam fissa. Peritheciis atris, in cortice nidulentibus, collis sulcatis convergentibus. Ascis clavatis, octosporis. Sporidiis allantoideis, hyalinis (.008 mm. long).

On bark of *Platanus*. N. Carolina.

1726. **Valsa (Eutypella) constellata**, *B. & C. Herb. Berk.* 8832.

Pustulis orbicularibus, in lineas vel inordinate dispositis, erumpentibus, dense gregariis. Perithesii atris, globosis, paucis (4-6), congestis, collis abbreviatis, ostiolo sulcato. Ascis clavatis, octosporis. Sporidiis allantoideis, hyalinis.

On branches of *Carya*, &c. N. Carolina.

1792. **Valsa (Euvalsa) pusio**, *B. & C. in Curt. Cat.* 142.

Pustulis parvulis, erumpentibus. Peritheciis atris, subglobosis, in cortice nidulantibus, epidermide fissurato cinctis; ostiolis subrugosis, brevibus, truncatis, in disco orbiculari emergentibus. Ascis clavatis, subsessilibus, octosporis. Sporidiis allantoideis, hyalinis, subfuscidulis (.008 × .002 mm.) *Herb. Berk.* 8934.

On bark of *Morus multicaulis*. N. Carolina.

1793. **Valsa (Euvalsa) Mulleriana**, *Cooke.*

Pustulis convexis, erumpentibus, majusculis, suborbicularibus. Peritheciis atris, ovatis, sursum in collis laevibus productis, hinc illic cum macrostylosporis in eadem pustulâ immixtis. Ascis clavatis, octosporis. Sporidiis inordinatis, allantoideis, hyalinis (.008 × .002 mm.), saepe .01 mm. long. Macrostylosporis in eadem vel alteram pustulis, pyriformibus, 2-3 septatis, longitudinaliter divisis fuscis (.012-014 × .009 mm.).

On oak branches. Eastbourne (C. J. Muller).

1864. **Valsa (Euvalsa) morigena**, *B. & C. Herb. Berk.* 8873.

Peritheciis globosis, linea nigra circumscripta, stromateque pallido, corticali immersis, demum crusta nigrificata tectis, ostiolis in disco minuto, atro, subconfluentibus, prominulis. Ascis cylindrico-clavatis. Sporidiis allantoideis, hyalinis (.01 × .002 mm.).

On bark of *Morus multicaulis*. S. Carolina (Ravenal, 595; Curtis, 1895).

Pustules large, not unlike *Aglaospora profusa*, soon more or less throwing off the epidermis.

1865. **Valsa (Euvalsa) coryneoides**, B. & C. Herb. Berk. 8981.

Pustulis minimis, primo tectis, demum erumpentibus. Peritheciis paucis, subglobosis, in disco fuligineo compactis. Ascis clavatis. Sporidiis allantoideis, hyalinis ( $\cdot 01 \times \cdot 012$  mm. long). = *Valsa thelebola*, Schwz. in Herb.

On bark of *Juniperus virginiana*. New Jersey.

1891. **Valsa (Euvalsa) subseriata**, Cooke.

Pustulis convexis, erumpentibus, subdiscoideis, 3-4, vix ultra, longitudinaliter seriatis. Peritheciis (10-16) subglobosis, sursum in ostiolis elongatis, laevibus congestis. Ascis clavatis, breviter stipitatis. Sporidiis majusculis, allantoideis, hyalinis ( $\cdot 03 \times \cdot 006$  mm.).

On branches of *Fagus*. Shiere (Dr. Capron, 167).

1854. **Valsa (Euvalsa) pullula**, B. & C. Herb. Berk. 8978.

Pustulis parvulis, primo tectis (statu imperfectu in Herb. Berk.). Ascis clavatis, octosporis. Sporidiis cylindraceis, utrinque rotundatis, leniter curvulis (sæpe rectis) hyalinis ( $\cdot 008$  mm. long).

On twigs of *Castanea*. Pennsylvania (Michener).

2005. **Valsa (Chorostate) neglecta**, Duby MSS.

Stromata epidermide tecto, nigro nigrescentive, ovato aut globosa, in ramis junioribus nullo, receptaculis 6, compresso ovatis verticalibus dense congestis, basi applanatis ; ostiolis exsertis, fragilibus, aterrimis, cylindricis, plus minus elongatis, truncato-papillatis, interdum inflexis, sæpe lateralibus. Ascis cylindricis, angustis. Sporidiis ovoideis, hyalinis, uniseriatis, nucleolatis, rarissime uniseptatis.—Duby in Herb. Currey.

Ad caules siccos *Genistæ tinctoria*.

2006. **Valsa (Chorostate) punctata**, Cooke.

Pustulis convexis, emergentibus, minimis. Peritheciis paucis in corticem nidulantibus, ostiolis brevibus, in disco orbiculari congestis. Ascis clavatis, breviter stipitatis, octosporis. Sporidiis biserialibus, ellipticis, rotundatis, medio uniseptatis, nec constrictis, hyalinis ( $\cdot 002 \times \cdot 007$  mm.).

On branches of *Tilia* and *Salix*. Edinbro' ; Sydenham.

2007. **Valsa (Chorostate) aesculicola**, Cooke.

Pustulis orbicularibus, in lineas breves dispositis. Peritheciis subglobosis, atris, congestis, ostiolis cylindricis, convergentibus, laevibus, emergentibus. Ascis clavatis. Sporidiis biserialibus, fusoideis, quadrinucleatis, demum uniseptatis, hyalinis ( $\cdot 02 \times \cdot 004$  mm.).

On branches of *Aesculus*. Sydenham.

2008. **Valsa (Chorostate) Bloxami**, Cooke.

Pustulis convexis, emergentibus. Peritheciis (12-20) congestis, pyriformibus, in collum elongatum productis, pulvero aureo-fulvo obductis ; disco orbiculari fusco. Ascis cylindricis, octosporis. Sporidiis uniserialibus, ellipticis vel sublanceolatis, medio uniseptatis, leniter constrictis, hyalinis ( $\cdot 022 \times \cdot 006$  mm.).

On branches of *Fagus*? Twycross (Bloxam 141).

2009. **Valsa (Chorostate) olivæstroma**, Cooke.

Erumpens. Pustulis sub-epidermide nidulantibus. Peritheciis (6-10) in circulos dispositis, stromate olivaceo pulveraceo insidentibus, collis subelongatis convergentibus. Ascis clavatis, octosporis. Sporidiis subuniserialibus, lanceolatis, medio uniseptatis, leniter constrictis, hyalinis ( $\cdot026\text{-}028 \times \cdot008$  mm.).

On branches of *Cerasus avium*. Jedburgh (Jerdon).

2010. **Valsa (Chorostate) fuscidula**, Cooke.

Pustulata, fusca. Pustulis erumpentibus convexis, subpulveraceis. Peritheciis paucis, immersis, collis elongatis, convergentibus, demum punctato-emergentibus. Ascis clavatis, breviter stipitatis, octosporis. Sporidiis inordinatis, arcte fusoideis, binucleatis, demum uniseptatis, hyalinis ( $\cdot018\text{-}02 \times \cdot0035$  mm.).

On oak twigs.

**Pseudovalsa (Valsaria) cratægi** (Winter, sub. nom. Diaporthe cratægi, Nke. in Herb., Cooke.)

Stroma valsoideum. Sporidiis sub-uniserialibus, ellipticis, uniseptatis, pallide fuscis ( $\cdot016\text{-}018 \times \cdot006$  mm.).

On *Crataegus*.

**Pseudovalsa (Valsaria) Caproni**, Cooke.

Pustulis in ligno immersis. Peritheciis subglobosis, atris, circinantibus, sursum in collis brevibus convergentibus productis. Ascis cylindraceis, octosporis. Sporidiis uniseriatis, ellipticis, medio uniseptatis, nec constrictis, fuscis ( $\cdot015 \times \cdot005$  mm.).

On denuded oak wood. Shere (Capron, 44).

2104. **Pseudovalsa tubulosa**, B. & C. Sacc. Syll. 3358.

This includes also *Calospora tribulosa*, Sacc. Syll. 3699, which is founded on a misprint in North Am. Fungi, No. 877.

2133. **Fenestella hormospora**, Cooke. *Valsa hormospora*, Berk. & Curt. in Herb. No. 8982. *Valsa (circinatæ) conjuncta*, Schwein. (nec Fries), Amer. Bot. No. 1383.

Peritheciis paucis, in circulos irregulares confertis, disco erumpente orbiculari albido pulverulento, ostiolis brevibus, subconjunctis. Ascis amplis, clavatis. Sporidiis sub-ellipticis, utrinque muticis, medio constrictis, 5 septatis, demum merenchymaticis, fuscis.

On branches. Bethlehem.

2132. **Fenestella callispora**, Cooke. *Sphaeria callispora* Duby in Herb. Currey.

Immersa, pustulata, erumpens, epidermide fissa tecta. Peritheciis paucis, minutissimis, globosis, congestis, ostiolis subnullis. Ascis clavatis. Sporidiis elliptico acuminatis, magnis, biserialibus quinquespeditatis, muriformibusque, luteo-fuscis ( $\cdot03\text{-}04 \times \cdot018$  mm.).

On branches of *Broussonetia papyrifera* Geneva.

2135. **Fenestella (Clethridium) schistostroma** (Duby), Cooke. *Sphaeria schistostroma*, Duby. in Rabh. Fungi, Eur. No. 53, Sacc. Syll. No. 4504.

Immersa, demum erumpens, epidermide cincta. Peritheciis 5-15 aggregatis, ovatis verticalibus inclinatisve, stromate nigro inaequabili primum compacto, demum in fragmenta plora diffisso tectis, ostiolis vix prominulis saepe obsoletis. Ascis cylindrico-elongatis rigidis.

Sporidiis uniserialibus ovoideo-ellipsoideis, primo uni-demum 3-5 septatis, et tandem merenchymaticis, hyalinis ('02×·01 mm.). *Duby.*

On branches of *Ribes aureus*. Geneva.

*Fam.* 6. VALSEÆ. Compositæ. Stroma e matrice mutata formatum. Perithecia discreta, circinantia, vel monosticha.

*Gen.* 1. **VALSA**, *Fries.* Perithecia cortice immersa in acervulos aggregata, in circulum simplicem v. compositum disposita; ostiolis convergentibus, erumpentibus et discum efformantibus; sporidiis hyalinis, continuis septatisve.

#### A. Sporidia allantoidea, hyalina.

*Sub-Gen.* 1. **VALSELLA**, *Fckl.* Perithecia cortice v. ligno immersa. Asci polyspori.

1652. <i>amphoraria</i> , <i>Ntke.</i>	602	1661. <i>clopima</i> , <i>Fr.</i>	...	611
1653. <i>furva</i> , <i>Karst.</i>	...	1662. <i>fertilis</i> , <i>Ntke.</i>	..	612
1654. <i>Laschii</i> , <i>Ntke.</i>	...	1663. <i>leptostroma</i> , <i>Fckl.</i>	613	
1655. <i>cydoniae</i> , <i>Rehm.</i>	...	1664. <i>clypeata</i> , <i>Fckl.</i>	...	614
1656. <i>minima</i> , <i>Niessl.</i>	...	1665. <i>myriothecia</i> , <i>Pass.</i>	615	
1657. <i>salicis</i> , <i>Fckl.</i>	...	1666. <i>polyspora</i> , <i>Ntke.</i> ...	616	
1658. <i>adhærens</i> , <i>Fckl.</i> ...	608	1667. <i>melastoma</i> , <i>Fr.</i> ...	617	
1659. <i>nigro-annulata</i> , <i>Fckl.</i>	609	1668. <i>papyriferæ</i> , <i>Schw.</i>	4184	
1660. <i>rosæ</i> , <i>Fckl.</i>	...	610		

*Sub-Gen.* 2. **CORONOPHORA**, *Fckl.* Perithecia subperidermio relaxato sublibera. Asci polyspori.

1669. <i>gregaria</i> , <i>Lib.</i>	...	413	1675. <i>Nitschkei</i> , <i>Sacc.</i>	...	419
1670. <i>angustata</i> , <i>Fckl.</i>	...	414	1676. <i>consobrina</i> , <i>Karst....</i>	...	420
1771. <i>macrosperma</i> , <i>Fckl.</i>	415		1677. <i>rosarum</i> , <i>Crouan.</i> ...	421	
1672. <i>abietina</i> , <i>Fckl.</i>	...	416	1678. <i>myriospora</i> , <i>D.R.&amp;M.</i> 422		
1673. <i>abieticola</i> , <i>Crouan.</i>	417		1679. <i>ootheca</i> , <i>B. &amp; C.</i> ...	423	
1674. <i>annexa</i> , <i>Ntke.</i>	...	418	1680. <i>Broomeiana</i> , <i>Berk....</i>	424	

*Sub-Gen.* 3. **EUTYPELLA**, *Sacc.* Perithecia cortice v. ligno immersa. Ostiola sulcata. Asci octospori.

1681. <i>isariphora</i> , <i>Ntke....</i>	563	1693. <i>Brunaudiana</i> , <i>Sacc.</i>	575
1682. <i>cerviculata</i> , <i>Fr.</i> ...	564	1694. <i>ventriosa</i> , <i>C. &amp; E.</i>	576
1683. <i>padi</i> , <i>Karst.</i>	...	1695. <i>ailanthi</i> , <i>Sacc.</i>	577
1684. <i>prunastri</i> , <i>Fr.</i> ...	566	1696. <i>radula</i> , <i>Pers.</i>	578
1685. <i>ventricosa</i> , <i>Fckl....</i>	567	(= <i>grandis</i> , <i>Ntke.</i> )	
1686. <i>sorbi</i> , <i>Schm.</i>	..	1697. <i>elegans</i> , <i>Niessl.</i> ...	579
1687. <i>pentagona</i> , <i>Pers....</i>	569	1698. <i>extensa</i> , <i>Fr.</i> ...	580
1688. <i>rhizophila</i> , <i>Ntke....</i>	570	1699. <i>confluens</i> , <i>Ntke.</i> ...	581
1689. <i>stellulata</i> , <i>Fr.</i> ...	571	(= <i>Morthieri</i> , <i>Sacc.</i> 5900)	
1690. <i>angulosa</i> , <i>Ntke.</i> ...	572	1700. <i>atropæ</i> , <i>Mont.</i> ...	582
1691. <i>similis</i> , <i>Karst.</i> ...	573	1701. <i>juglandis</i> , <i>Schw. herb.</i>	
1692. <i>alnifraga</i> ( <i>Wahl.</i> )	574	1702. <i>juglandina</i> , <i>C. &amp; E.</i>	583

1703. *fraxinicola*, *C. & Peck.* 584  
 1704. *Leaiana*, *Berk.* ... 585  
 1705. *berchemiae*, *Cke.* ... 586  
 1706. *goniostoma* (*Schw.*),  
     *B. & C.* ... 587, 4189  
 1707. *exanthemoides*, *Mont.* 588  
 1708. *microspora*, *C. & Plow.* 589  
 1709. *monticulosa*, *B. & C.* 591  
 1710. *platani*, *Schw.* ... 592  
 1711. *tumidula*, *C. & Peck.* 593  
 1712. *Tosquinetii*, *West.* 594  
 1713. *tetraploa*, *B. & C.* 595  
 1714. *rugiella*, *C. & E.* ... 596  
 1715. *corynóstoma*, *B. & Rav.* 597
1716. *innumerabilis*, *Peck.* 598  
 1717. *Bonariensis*, *Speg.* 599  
 1718. *venusta*, *Ellis* ... 5901  
 1719. *anthracina*, *Speg.* ... 600  
 1720. *lutescens*, *Ellis* ... 5902  
 1721. *paradisiaca*, *Speg.* 601  
 1722. *niphoclina*, *Cke.* ... 5903  
 1723. *aleurina*, *B. & C. Grev.* xiv  
     46  
 1724. *Halseyana*, *Schw.* 4188  
 1725. *vitis*, *Schw.* 669 p.p.  
 1726. *constellata*, *B. & C. Grev.*  
     xiv. 46

SUB-GEN. 4. LEUCOSTOMA, *Ntke.* Discus saepius albus, v.  
 cinereus, v. flavidus. Ostiola nec subcata. Asci octospori.

1727. *nivea* (*Hoffm.*) ... 533  
 1728. *Auerswaldii*, *Ntke.* 534  
 1729. *Massariana*, *DeNot.* 535  
 1730. *excipienda*, *Karst.* ... 536  
 1731. *leucostoma*, *Pers.* ... 537  
 1732. *Kunzei*, *Fries.* ... 538  
 1733. *strobi*, *Pass.* ... 539  
 1734. *superficialis*, *Ntke.* ... 540  
 1735. *duriuscula*, *Ott.* ... 541  
 1736. *diatrypa*, *Fries.* ... 542  
 1737. *praestans*, *B. & C.* ... 462  
 1738. *aquifolii*, *Ntke.* ... 543  
 1739. *translucens*, *DeNot.* 544  
 1740. *cincta*, *Fries.* ... 545  
 1741. *lauro-cerasi*, *Tul.* ... 546  
 1742. *ceuthosporæ*, *Cke.* ... 547
1743. *abrupta*, *Cke.* ... 548  
 1744. *crocina*, *Mont.* ... 549  
 1745. *caryogena*, *B. & C.* 550  
 1746. *orbicula*, *B. & C.* ... 551  
 1747. *chlorodisca*, *C. & E.* 552  
 1748. *fulvella*, *B. & Rav.* 553  
 1749. *linderæ*, *Peck.* ... 554  
 1750. *infinitissima*, *Kalch.*  
     *& Cke.* ... 555  
 1751. *munda*, *B. & C.* ... 556  
 1752. *mesoleuca*, *B. & C.* ... 557  
 1753. *subclypeata*, *C. & Pk.* 490  
 1754. *viburni*, *Fckl.* ... 558  
 1755. *tessella*, *Fr.* ... 559  
 1756. *Welwitschii*, *Berk.* 560  
 1757. *colliculus*, *Worm.* ... 562

SUB-GEN. 5. EUVALSA, *Ntke.* Discus saepius ater. Ostiola nec  
 sulcata. Asci octospori.

\* MICROSPORÆ. *Sporidia* vix 8 mm. longa.

1758. *ceratophora*, *Tul.* ... 429  
     v. *rosarum*, *Not.* ...  
 1759. *coronata*, *Hoffm.* ... 433  
     v. *melanosticta*, *M.* ...  
 1760. *cenisia*, *DeNot.* ... 434  
     v. *invalida*, *K.* ...  
 1761. *abietis*, *Fr.* ... 437  
     v. *ceratina*, *Fr.* ...  
 1762. *pini*, *Ass. & C.* ... 443  
 1763. *decumbens*, *Schm.* 446  
 1764. *cristata*, *Ntke.* ... 451
1765. *haustellata*, *Fr.* ... 463  
 1766. *rhamnicola*, *Fab.* ... 467  
 1767. *subcuticularis*, *C. & E.* 470  
 1768. *pulchelloidea*, *C. & E.* 471  
 1769. *parasitica*, *C. & E.* 484  
 1770. *quercina*, *Curr.* ... 472  
 1771. *demissa*, *Ntke.* ... 474  
 1772. *excorians*, *C. & E.* 479  
 1773. *Stephania*, *Pass.* ... 481  
 1774. *nepalensis*, *Berk.* ... 485  
 1775. *delicatula*, *C. & E.* 489

1776. glandulosa, <i>Cke.</i> ....	494	1786. indistincta, <i>Schw.</i>	4187
1777. lavateræ, <i>C. &amp; Hk. Grev.</i> 8.		1787. conspurcata, <i>Schw.</i>	4193
1778. gossypina, <i>Cke.</i> ...	496	1788. deformis, <i>Fr.</i> ...	4201
1779. echidna, <i>Cke.</i> ...	498	1789. rimicola, <i>Schw.</i> ...	4214
1780. erinacea, <i>B. &amp; Rav.</i>	1496	1790. syngenesia, <i>Fr.</i> ...	511
1781. microspora, ( <i>Cr.</i> )...	500	1791. Sallei, <i>Berk.</i> ...	4177
1782. macluræ, <i>C. &amp; E.</i>	501	1792. pusio, <i>B. &amp; C. Grev.</i> xiv. 46	
1783. agnóstica, <i>Cke. Grev.</i> xiii.		1793. Mulleriana, <i>Cke. Grev.</i> xiv.	
17.		46	
1784. juglandicola, <i>Schw.</i>	4173	1793* lupini, <i>C. &amp; Hk. Grev.</i> xiv. 8	
1785. variolaria, <i>Schw.</i> ....	4180		

\* MESOSPORÆ. Sporidia 8-12 mm.

1794. rubi, <i>Fckl.</i> ...	430	1827. liquidambaris, <i>Schw.</i>	477
1795. cænobitica, <i>Ces.</i> ...	431	1828. sorbicola, <i>Ntke.</i> ...	478
1796. coacta, <i>S. &amp; Sp.</i> ...	432	1829. concamerata, <i>Curr.</i>	480
1797. sabalina, <i>Cke.</i> ...	435	1830. nyssæ, <i>Cke.</i> ...	482
1798. strobiligena, <i>Sacc. &amp; R.</i>	436	1831. præclara, <i>Mont.</i> ...	483
1799. microstoma, <i>Pers.</i>	438	1832. anomia, <i>Schw.</i> ...	486
1800. Fuckelii, <i>Ntke.</i> ...	440	1833. ligustrina, <i>Cke.</i> ...	487
1801. affinis, <i>Ntke.</i> ...	441	1834. juniperina, <i>Cke.</i> ...	488
1802. fallax, <i>Ntke.</i> ...	442	1835. rhoiphila, <i>C. &amp; E.</i>	493
1803. leiphemooides, <i>B. &amp; C.</i>	444	1836. campylospora, <i>Mont.</i>	495
1804. insignis, <i>Ntke.</i> ...	445	1837. eucalypti, <i>Cke.</i> ...	497
1805. Schweinitzii, <i>Ntke.</i>	447	1838. monadelpha, <i>Fr.</i> ...	499
1806. syringæ, <i>Ntke.</i> ...	448	1839. pseudoplatani, <i>Fr.</i>	502
1807. vitigera, <i>Cke.</i> ...	449	1840. decidua, <i>C. &amp; E.</i> ....	503
= <i>vitis</i> , <i>Sacc.</i>		1841. subscripta, <i>Fr.</i> ...	504
1808. verrucula, <i>Ntke.</i> ...	450	1842. stenosporæ, <i>Tul.</i> ...	505
1809. Spegazziniana, <i>Sacc.</i>	452	1843. alni, <i>Peck.</i> ...	506
1810. ribesia, <i>Karst.</i> ...	453	1844. subcongrua, <i>Rehm. Asc.</i>	
1811. exigua, <i>Ntke.</i> ...	454	1845. americana, <i>B. &amp; C.</i>	507
1812. horrida, <i>Ntke.</i> ...	455	1846. truncata, <i>C. &amp; Pk.</i>	508
1813. Hoffmanni, <i>Ntke.</i>	456	1847. acclinis, <i>Fr.</i> ...	510
1814. oxystoma, <i>Rehm.</i> ....	457	1848. tenella, <i>Fab.</i> ...	5895
1815. Friesii, <i>Duby.</i> ...	458	1849. diatrypoides, <i>Rehm.</i>	5899
1816. incrustata, <i>Ntke.</i> ....	459	1850. myricæ, <i>C. &amp; E.</i> ....	590
1817. intermedia, <i>Ntke.</i>	460	1851. cathartocarpi, <i>Lev.</i>	4178
1818. sordida, <i>Ntke.</i> ...	461	1852. rubincola, <i>Schw.</i> ...	4181
1819. mendax, <i>Mont.</i> ...	464	1853. radicum, <i>Schw.</i> ...	4182
1820. multiplex, <i>C. &amp; E.</i>	465	1854. pullula, <i>B. &amp; C. Grev.</i> xiv.	
1821. terebinthi, <i>Fab.</i> ...	466	47	
1822. perfodiens, <i>Ntke.</i> ...	468	1855. quadrifida, <i>Schw.</i>	4183
1823. accedens, <i>Sacc.</i> ...	469	1856. modesta, <i>Schw.</i> ...	4186
1824. cornicola, <i>Cke.</i> ...	473	1857. conceptata, <i>Schw.</i>	4191
1825. Dubyi, <i>Ntke.</i> ...	475	1858. aractina, <i>Fr.</i> ...	4198
1826. decorticans, <i>Fr.</i> ...	476	1859. rhizina, <i>Schw.</i> ...	4215

\*\* MACROSPORÆ. *Sporidia* 12 mm. excedente.

1860. mediterranea, <i>DeNot.</i> 439	1876. pustulata, <i>Awd.</i> ...	523
1861. conscripta, <i>C. &amp; E.</i> 491	1877. taxi, <i>Fckl.</i> ...	524
1862. clausa, <i>C. &amp; E.</i> ... 492	1878. pauperata, <i>C. &amp; E.</i> 525	
1863. punica, <i>S. &amp; Sp.</i> ... 509	1879. co-operta, <i>Cooke</i> ... 526	
1864. morigena, <i>B. &amp; C. Grev.</i> xiv. 46	1880. dolosa, <i>Fr.</i> ... 527	
1865. coryneoides, <i>B. &amp; C. Grev.</i> xiv. 47	1881. laurina, <i>C. &amp; E.</i> ... 528	
1866. ambiens, <i>Fr.</i> ... 512	1882. rhodophila, <i>B. &amp; Br.</i> 529	
1867. populina, <i>Fckl.</i> ... 513	1883. Fabreana, <i>Sacc.</i> ... 530	
1868. salicina, <i>Pers.</i> ... 514	1884. inclinis, <i>Sacc.</i> ... 531	
1869. Curreyi, <i>Ntke.</i> ... 516	= <i>acclinis</i> , <i>Schw.</i>	
1870. cypri, <i>Tul.</i> ... 517	1885. conoidea, <i>Rehm.</i> ... 5897	
1871. betulina, <i>Ntke.</i> ... 518	1886. orni, <i>Rehm.</i> ... 5898	
1872. germanica, <i>Ntke.</i> ... 519	1887. ceanothi, <i>Schw.</i> ... 4192	
1873. obtecta, <i>C. &amp; E.</i> ... 520	1888. expers, <i>Schw.</i> ... 4213	
1874. olivacea, <i>Fckl.</i> ... 521	1889. aperta, <i>Fr. Grev.</i> xiii. 40	
1875. sepincola, <i>Fckl.</i> ... 522	1890. dryophila, <i>Niessl.</i> <i>Rabh. F. E.</i> 1941	
	1891. subseriata, <i>Cooke Grev.</i> xiv. 47	

SUB.-GEN. 6. QUATERNARIA, *Tul.* Perithecia quaterna v. pauca.

1892. Persoonii, <i>Tul.</i> ... 425	1895. regularis, <i>Ntke.</i> ... 428	
= <i>quaternata</i> , <i>Fr.</i>	1896. <i>megas</i> , <i>Awd. in Rab. F. E.</i> 815	
1893. dissepta, <i>Fr.</i> ... 426		
1894. Morthieri, <i>Fckl.</i> ... 427	1897. <i>abnormis</i> , <i>Fr.</i> ... 4208	

SUB.-GEN. 7. CALOSPHÆRIA, *Tul.* Perithecia sub-peridermio relaxato sublibera.a. *Eu-calosphæria*. Peritheciis rostellatis.\* *Perithecia glabra*.

1898. pulchella, <i>P.</i> ... 391	1903. corylina, <i>Ntke.</i> ... 396	
= <i>princeps</i> , <i>Tul.</i>	1904. dryina, <i>Curr.</i> ... 397	
1899. ciliatula, <i>Fr.</i> ... 392	1905. microtheca, <i>C. &amp; E.</i> 398	
1900. pusilla, <i>Wahl.</i> ... 393	1906. macrospora, <i>Wint.</i> 399	
1901. assecla, <i>Schw.</i> ... 394	1907. cylindrica, <i>K. &amp; C.</i> 400	
1902. parasitica, <i>Fckl.</i> ... 395	1908. capillaris, <i>S. &amp; P.</i> 5894	

\*\* *Perithecia villosula* v. *furfurella*.

1909. tædiosa, <i>Sacc.</i> ... 401	1912. affinis, <i>Ntke.</i> ... 404	
1910. villosa, <i>Ntke.</i> ... 402	1913. obvoluta, <i>Karst.</i> ... 405	
1911. aurata, <i>Ntke.</i> ... 403	1914. scabriseta, <i>Schw.</i> ... 406	

= *biformis*, *Tul.*b. *Erostella*. Peritheciis erostratis.\* *Perithecia glabra*.

1915. vasculosa, <i>Sacc.</i> ... 407	1918. tumidula, <i>Sacc.</i> ... 410	
1916. recedens, <i>Niessl.</i> ... 408	1919. vibratilis, <i>Fr.</i> ... 411	
1917. minima, <i>Tul.</i> ... 409		

\*\* *Perithecia hirsuta.*1920. *jungens*, *Ntke.* ... 412

B. Sporidia ovata vel fusoidea, vel bacillaria.

SUB-GEN. 8. CRYPTOSPORELLA, *Sacc.* Sporidia ovata, v. fusoidea.

1921. <i>hypodermia</i> , <i>Fr.</i> ... 1801	1932. <i>Niesslia</i> , <i>Kunze</i> ... 1812
1922. <i>Limminghii</i> , <i>Kickx</i> 1802	1933. <i>innata</i> , <i>B. &amp; C.</i> ... 1814
1923. <i>aurea</i> , <i>Fckl.</i> ... 1803	1934. <i>albo-fusca</i> , <i>C. &amp; E.</i> 1815
== <i>amygdalina</i> , <i>Cooke.</i>	1935. <i>Ehrenbergii</i> , <i>Tul.</i> 1816
1924. <i>Daldiniana</i> , <i>Not.</i> ... 1804	1936. <i>platanigera</i> , <i>B &amp; Br.</i> 1817
1925. <i>chondrospora</i> , <i>Ces.</i> 1805	1937. <i>foraminula</i> , <i>Pers.</i> ... 1818
1926. <i>populina</i> , <i>Fckl.</i> ... 1806	1938. <i>phomaspora</i> , <i>C. &amp; E.</i> 2439
1927. <i>veneta</i> , <i>Sacc.</i> ... 1807	1939. <i>macrostoma</i> , <i>Rehm.</i> 561
1928. <i>aesculi</i> , <i>Fckl.</i> ... 1808	1940. <i>ampelopsisidis</i> , <i>Ellis</i> 6025
1929. <i>compta</i> , <i>Tul.</i> ... 1809	1941. <i>divergens</i> , <i>Schw.</i> <i>Grev. xiii.</i> , 40
1930. <i>sphaerostoma</i> , <i>Ntke.</i> 1810	
1931. <i>leptasca</i> , <i>C. &amp; P.</i> ... 1811	1942. <i>mahaleb</i> , <i>C. &amp; E.</i> 532

SUB-GEN. 9. CRYPTOSPORA, *Tul.* Sporidia bacillaria.

1943. <i>suffusa</i> , <i>Fr.</i> ... 4116	1948. <i>cinctula</i> , <i>Cke. &amp; Pk.</i> 4121
1944. <i>femoralis</i> , <i>Peck.</i> ... 4117	1949. <i>trichospora</i> , <i>C. &amp; P.</i> 4122
1945. <i>rhabdospora</i> , <i>Not.</i> ... 4118	1950. <i>tiliae</i> , <i>Tul.</i> ... 4123
1946. <i>intexta</i> , <i>Curr.</i> ... 4119	1951. <i>betulæ</i> , <i>Tul.</i> ... 4124
1947. <i>corylina</i> , <i>Tul.</i> ... 4120	1952. <i>vasculosa</i> , <i>Schw.</i> ... 4203
== <i>versatilis</i> , <i>Fr.</i> ... 4144	1953. <i>umbilicata</i> , <i>Pers.</i> ... 4210

## C. Sporidia uni-vel pluri-septata.

SUB-GEN. 10. CHOROSTATE, *Ntke.* Sporidia uniseptata.

1954. <i>conjuncta</i> , <i>Nees.</i> ... 2353	1974. <i>albo-velata</i> , <i>B. &amp; C.</i> 2381
1955. <i>Kunzeana</i> , <i>Sacc.</i> ... 2354	1975. <i>Woolworthii</i> , <i>Peck.</i> 2383
1956. <i>bitorulosa</i> , <i>B. &amp; Br.</i> 2355	1976. <i>dryophila</i> , <i>Nssl.</i> ... 2384
1957. <i>decipiens</i> , <i>Sacc.</i> ... 2356	1977. <i>leiphemia</i> , <i>Fr.</i> ... 2385
1958. <i>carpini</i> , <i>Pers.</i> ... 2357	1978. <i>quercina</i> , <i>Fckl.</i> ... 2386
1959. <i>mucosa</i> , <i>Wint.</i> ... 2358	1979. <i>Robergeana</i> , <i>Desm.</i> 2388
1960. <i>longirostris</i> , <i>Tul.</i> ... 2359	1980. <i>ocularia</i> , <i>C. &amp; E.</i> ... 2389
1961. <i>mamiana</i> , <i>Sacc.</i> ... 2360	1981. <i>pulchra</i> , <i>Curr.</i> ... 2390
1962. <i>Niesslia</i> , <i>Sacc.</i> ... 2361	1982. <i>paulula</i> , <i>C. &amp; E.</i> ... 2391
1963. <i>aceris</i> , <i>Fckl.</i> ... 2363	1983. <i>patria</i> , <i>Speg.</i> ... 2392
1964. <i>albocincta</i> , <i>C. &amp; P.</i> 2364	1984. <i>impulsa</i> , <i>C. &amp; P.</i> ... 2395
1965. <i>acerina</i> , <i>Peck.</i> ... 2365	1985. <i>furfuracea</i> , <i>Fr.</i> ... 2396
1966. <i>myinda</i> , <i>C. &amp; E.</i> ... 2368	1986. <i>fibrosa</i> , <i>Pers.</i> ... 2397
1967. <i>hippocastani</i> , <i>Cooke</i> , <i>Grev.</i> xiii. 98	1987. <i>extensa</i> , <i>Fr.</i> ... 2398
	1988. <i>faginea</i> , <i>Curr.</i> ... 2399
1968. <i>Oudemansii</i> , <i>Sacc.</i> 2369	1989. <i>euryala</i> , <i>Mont.</i> ... 2400
1969. <i>oncostoma</i> , <i>Duby</i> ... 2370	1990. <i>decorticans</i> , <i>Lib.</i> ... 2402
1970. <i>personata</i> , <i>C. &amp; E.</i> 2371	1991. <i>difficilior</i> , <i>Kunze</i> ... 2403
1971. <i>enteroleuca</i> , <i>Fr.</i> ... 2372	1992. <i>tuberculosa</i> , <i>Ellis.</i> , 2404 6495
1972. <i>transversalis</i> , <i>Karst.</i> 2373	
1973. <i>sociata</i> , <i>C. &amp; E.</i> ... 2378	1993. <i>fulvopruinata</i> , <i>B&amp;C</i> 2407

1994. <i>ailanthi</i> , <i>Sacc.</i> ...	2408	2005. <i>neglecta</i> , <i>Duby.</i> , <i>Grev.</i>
1995. <i>apocrypta</i> , <i>C. &amp; E.</i> 2409		xiv. 47
1996. <i>lixivia</i> , <i>Fr.</i> ...	2410	2006. <i>punctata</i> , <i>Cooke</i> , <i>Grev.</i> xiv.
1997. <i>bicincta</i> , <i>C. &amp; P.</i> ...	2411	47
1998. <i>corymbosa</i> , <i>C. &amp; E.</i> 2412		2007. <i>aesculicola</i> , <i>Cooke</i> , <i>Grev.</i>
1999. <i>binoculata</i> , <i>Ellis</i> ...	6093	xiv. 47
2000. <i>tecta</i> , <i>Cooke</i> . ...	6091	2008. <i>Bloxami</i> , <i>Cooke</i> , <i>Grev.</i> xiv.
2001. <i>leucopis</i> , <i>Fr.</i> ...	6094	47
2002. <i>stictostoma</i> , <i>Ellis</i> ...	6096	2009. <i>olivæstroma</i> , <i>Cooke</i> , <i>Grev.</i>
2003. <i>cercophora</i> , <i>Ellis</i> ...	6097	xiv. 48
2004. <i>marchica</i> , <i>Rehm</i> , <i>Syдов</i> , <i>Exs.</i> 553.		2010. <i>fuscidula</i> , <i>Cooke</i> , <i>Grev.</i> xiv. 48

CHOROSTELLA. *Sporidia appendiculata*.

2011. <i>hystricula</i> , <i>S. &amp; Sp.</i> 2417		2019. <i>taleola</i> , <i>Fr.</i> ...	2426
2012. <i>castanea</i> , <i>Tul.</i> ...	2418	2020. <i>oxysspóra</i> , <i>Peck.</i> ...	2427
2013. <i>leiphemoides</i> , <i>Fckl.</i> 2419		2021. <i>nidulans</i> , <i>Nssl.</i> ...	2428
2014. <i>sulphurea</i> , <i>Fckl.</i> ...	2421	2022. <i>obscura</i> , <i>Peck.</i> ...	2429
2015. <i>affinis</i> , <i>Sacc.</i> ...	2422	2023. <i>Saccardiana</i> , <i>Kunze</i>	2430
2016. <i>decedens</i> , <i>Fr.</i> ...	2423	2024. <i>per juncta</i> , <i>Nsl.</i> ...	2431
2017. <i>tessera</i> , <i>Fr.</i> ...	2424	2025. <i>tessella</i> , <i>Pers.</i> ...	2432
2018. <i>syngenesia</i> , <i>Fr.</i> ...	2425	2026. <i>glyptica</i> , <i>B. &amp; C.</i> ...	2433
= <i>appendiculosa</i> , <i>Awd.</i>		2027. <i>mucronata</i> , <i>Peck.</i>	2434
= <i>frangulæ</i> , <i>Pers.</i>		2028. <i>galericulata</i> , <i>Tul.</i>	2435

## DUBIÆ.

2029. <i>chrysoides</i> , <i>Tul.</i> ...	2436	3032. <i>innata</i> , <i>B. &amp; C.</i> ...	2440
2030. <i>convexa</i> , <i>Pr.</i> ...	2437	2033. <i>tortuosa</i> , <i>Fr.</i> ...	2441
2031. <i>castriformis</i> , <i>Pr.</i> ...	2438	2034. <i>ciliata</i> , <i>Pers.</i> ...	2442

SUB-GEN. 11. CALOSPORA, *Sacc.* *Sporidia triseptata*.

2035. <i>stilbostoma</i> , <i>Cooke</i> 2382		2043. <i>pennsylvanica</i> , <i>B. &amp; C.</i> ...	-
= <i>rhois</i> , <i>Cooke</i>		... 3700	
2036. <i>detrusa</i> , <i>Fr.</i> ...	2401	2044. <i>secedens</i> , <i>M. &amp; Fr.</i> 3701	
2037. <i>eratægi</i> , <i>Curr.</i> ...	2405	2045. <i>aculeans</i> , <i>Schw.</i> ...	3703
2038. <i>platanoides</i> , <i>Pers.</i>	3695	<i>rufescens</i> , <i>Schw.</i>	
2039. <i>Innesii</i> , <i>Curr.</i> ...	3696	2046. <i>gemma</i> , <i>B. &amp; C.</i> 3704	
2040. <i>capsularis</i> , <i>Pers.</i> ...	3697	2047. <i>inconspicua</i> , <i>C. &amp; E.</i> 3706	
2041. <i>Zopfii</i> , <i>Kunze</i> ...	3698	2048. <i>aglæostoma</i> , <i>B. &amp; Br.</i> 3357	
2042. <i>pustulata</i> , <i>Desm.</i> ...	2362	2049. <i>strumellæformis</i> , <i>Not.</i> ... 2377	

GEN. 2. MELANCONIS, *Tul.* *Sacc. Syll.* 1., 602. Stroma valseum nigricans v. flavidum. Perithecia circinantia. Sporidia uniseptata, hyalina v. fusca. Status conidicus *Melanconium* sistens.

a. EU-MELANCONIS. *Sporidiis muticis, hyalinis.*

2050. <i>stilbostoma</i> , <i>Fr.</i> ...	2343	2052. <i>carthusiana</i> , <i>Fckl.</i> 2345
2051. <i>modonia</i> , <i>Fr.</i> ...	2344	2053. <i>fennica</i> , <i>Karst.</i> ... 2346

2054. asteropycnis, Cr. 2347 2057. Everhardtii, Ell. Torr.  
 2055. dolosa, Fr. ... 2348 Cl., 1883, 117  
 2056. alniella, Rehm. Asco. 148

*b. MELANCONIDIUM.* Sporidiis appendiculatis, hyalinis.

2058. Alni, *Tul.* ... 2349 2060. occulta, *Fr.* ... 2351  
 2059. thelebola, *Fr.* ... 2350

c. MELANCONIELLA. Sporidiis fuscis.

2061. *spodiæi*, *Tul.* ... 2805    2066. *Meschuttii*, *Ell.* & *Ev.*  
 2062. *chrysostroma*, *Fr.* 2806                          *Bull. Torr. Cl.*, 1883, 117  
 2063. *leucostroma*, *Niessl.* 6122    2067. *biansata*, *Ell.* & *Ev.* *Bull.*  
 2064. *decorahensis*, *Ell.* 6123                          *Torr. Cl.*, 1883, 118  
 2065. *apocrypta*, *Ell.* ... 6124

*d. HERCOSPORA, Fr.* Pyenidium *Rabenhorstiam* sistens.

2068. Tiliæ, Fr. ... 2352

**GEN. 3. PSEUDOVALSA**, *Not.* Stroma valsiforme, innatum. Sporidia plerumque septata, fusca.

\* Sporidia continua, hyalino-apiculata.

- 206<sup>c</sup>. *amygdalina*, Cooke 1147

\* VALSARIA. Sporidia uniseptata.

- |  |  |
|--|--|
| 2070. <i>celtidis</i> , <i>Cooke</i> ... 2808      | 2083. <i>nigrificata</i> , <i>C. &amp; E.</i> 2834                       |
| 2071. <i>Notarisii</i> , <i>Mont.</i> ... 2810     | 2084. <i>duriſſima</i> , <i>Fckl.</i> ... 2835                           |
| 2072. <i>Kunzeiana</i> , <i>Not.</i> ... 2815      | 2085. <i>fædans</i> , <i>Karst.</i> ... 2836                             |
| 2073. <i>parmularia</i> , <i>Berk.</i> ... 2816    | 2086. <i>Niesslii</i> , <i>Wint.</i> ... 2837                            |
| 2074. <i>melastroma</i> , <i>Fr.</i> ... 2819      | 2087. <i>megalospora</i> , <i>Awd.</i> 2838                              |
| 2075. <i>apatos</i> , <i>C. &amp; E.</i> ... 2822  | 2088. <i>donacina</i> , <i>Not.</i> ... 2840                             |
| 2076. <i>Peckii</i> , <i>Howe</i> , ... 2825       | 2089. <i>majuscula</i> , <i>C. &amp; H.</i> , <i>Grev.</i><br>xiii., 17. |
| 2077. <i>phlyctænoides</i> , <i>Mont.</i> 2827     | 2090. <i>cratægi</i> , <i>Wint.</i> , <i>Grev.</i> xiv.<br>48            |
| 2078. <i>purpurascens</i> , <i>DC.</i> 2828        | 2091. <i>Caproni</i> , <i>Cooke</i> , <i>Grev.</i> xiv.<br>48            |
| 2079. <i>complexa</i> , <i>Mont.</i> ... 2829      | 2092. <i>bignoniæ</i> , <i>Schw.</i> ... 4194                            |
| 2080. <i>oleifera</i> , <i>Tul.</i> ... 2830       |  |
| 2081. <i>fulvo-pruinata</i> , <i>Berk.</i> 2831    |  |
| 2082. <i>clethricola</i> , <i>C. &amp; E.</i> 2833 |  |

\*\* AGLAOSPORA, *Not.* Sporidia tri-vel pluriseptata.

a. *Geminispora*. Asci bispori.

2093. titan, B. & R. ... 3350

*b. Asci tetraspori.*

2094. profusa, Not. .. 3346 = anomia, Fr.  
       = seiridia, B. & C. 2095. effusa, Rehm. ... 3347  
       = macrospora, B. & Br. 2096. Malbrancheana,  
       = Sartwelli, B. & C.                      Sacc. ... 3348  
       = ocellata, Schw.

*c. Asci octospori.*

## † Sporidia mutica.

2097. lanciformis, <i>Fr.</i> ... 3349	2102. xanthoxyli, <i>Peck</i> , 3355,
2098. umbonata, <i>Tul.</i> ... 3351	4016.
2099. stigmoidea, <i>C. &amp; E.</i> 3352	2103. sambucina, <i>Peck</i> ... 3356
2100. longipes, <i>Tul.</i> ... 3353	2104. tubulosa, <i>B. &amp; C.</i> , 3699,
2101. convergens, <i>Tode.</i> 3354	3258.

## †† Sporidia hyalino-appendiculata.

2105. Berkeleyi, <i>Tul.</i> ... 3359	2108. macrosperma, <i>Tul.</i> 3362
2106. aucta, <i>B. &amp; Br.</i> ... 3360	2109. Kickxii, <i>West</i> ... 3363
2107. hapalocystis, <i>B. &amp; Br.</i> 3361	2110. bicornis, <i>Cooke</i> ... 3364

GEN. 4. **FENESTELLA**, *Tul.* *Sacc. Syll. II.*, 325.—Stroma corticale, valseum. Sporidia multiseptata, muriformia vel clathrata.

## \* EU-FENESTELLA. Sporidia colorata.

2111. princeps, <i>Tul.</i> ... 3995	2124. salicis, <i>Rehm.</i> ... 4008
2112. tetratrupha, <i>B. &amp; Br.</i> 3996	2125. rostrata, <i>Fckl.</i> ... 4009
2113. minor, <i>Tul.</i> ... 3997	2126. Faberi, <i>Kunze.</i> ... 4010
2114. bipapillata, <i>Tul.</i> ... 3998	2127. betulæ, <i>Nees.</i> ... 4011
2115. media, <i>Tul.</i> ... 3999	2128. superficialis, <i>C. &amp; P.</i> 4012
2116. phaeospora, <i>Sacc.</i> ... 4000	2129. vitellina, <i>Mont.</i> ... 4013
2117. macrospora, <i>Fckl.</i> 4001	2130. castanicola, <i>B. &amp; C.</i> 4014
2118. Mougeotii, <i>Pers.</i> ... 4002	2131. frit, <i>Sacc. (vix Fries)</i> 4015
2119. melastoma, <i>Fr.</i> ... 4003	2132. callispora, <i>Duby.</i> , <i>Grev.</i>
2120. vestita, <i>Fr.</i> ... 4004	xiv. 48
2121. lycii, <i>Duby.</i> ... 4005	2133. hormospora, <i>B. &amp; C.</i> , <i>Grev.</i>
2122. tumida, <i>Pers.</i> ... 4006	xiv. 48
2123. condensata, <i>B. &amp; C.</i> 4007	

## \*\* CLETHRIDIUM. Sporidia hyalina.

2134. Burchelli, <i>Cooke</i> ... 4017	2135. schistostroma, <i>Duby.</i> 4504
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FLORA VENETA CRITTOGAMICA (*Bizzozero*).—The first part of this work, consisting of 570 pages, octavo, contains the Fungi in a very compact form for reference, and clearly printed. The only disadvantage, and that a considerable one for British students, is that the descriptions are all in Italian, otherwise, as it contains measurements under every species, it would be exceedingly useful. It need scarcely be said that the Pyrenomycetes are classed fundamentally on the system propounded by Saccardo. There is a copious index, and the price is fifteen shillings.

## NEW BRITISH FRESH-WATER ALGÆ.

**Vaucheria sphærospora.** *Nordst. Bot. Not.*, 1878, p. 177, t. 2.

Loosely cæspitose, antheridia at the apex of longer or rarely of the shorter branches, slightly tumid, very often a little incurved, acuminate, furnished about the apex with two (rarely four) nearly opposite divergent conical processes, connected with the side or the base (at first with the apex) of the oogonium, by means of a short cell destitute of chlorophyll. Oogonium globose, or obovate-globose, oospore globose, chlorophyllose, membrane not thick, not entirely filling the oogonium.

SIZE.—Threads, .026-.06 mm. diam. Oogonia, .104-.136 mm. diam. Oospore, .088-.120 mm. diam.

On the mud at low water of the Thames at Kew. Commonly marine.

Found by Professor O. Nordstedt. August, 1885.

**Palmodactylon subramosum.** *Nag.*

This form, which we regard as a condition of *Hydrurus penicellatus*, has been found in Yorkshire by Mr. T. Hebden, of Keighley, as recorded in the Journal of the Quekett Microscopical Club.

Pomologists and Mycologists will alike be grieved to read the following sad announcement :—

HENRY GRAVES BULL, M.D.

(*Of Hereford*),

DIED ON SATURDAY EVENING, OCT. 31, 1885,

AFTER A BRIEF ILLNESS,

Aged 67 years.

The great work which he laboured to perfect, “The Herefordshire Pomona,” was just completed, and the smaller “Handbook” of the Apples and Pears of Herefordshire commenced, when he was suddenly struck down by a fearful and insidious disease. Those who have met him year by year at the Fungus Forays of the Woolhope Club, will ever remember his smiling face, his kindly and amiable disposition, and his indomitable energy. All that large number of survivors who had the privilege of his friendship will unite in the testimony that—

“We shall not look upon his like again.”

## BRAITHWAITE'S BRITISH MOSS FLORA.

We are happy to announce the appearance of the ninth part of this excellent work, and, in common with the majority of subscribers, can only hope that succeeding parts will be accelerated as much as possible. Having every sympathy with a business man who finds his leisure far too little for such a project, we nevertheless cannot conceal our anxiety for the more rapid progress of the work. The present part continues the *Tortulaceæ*, with four plates; the total number of which are now 36, and the letter-press reaches to page 244. The acknowledged merit of this Flora disarms criticism, and it is, in fact, just because it is so good, and so much wanted, that we cannot help regretting its slow progress. The next part is announced to contain eight plates, which will complete the first volume, "including one-half of our Acrocarpous Mosses." It would greatly increase the confidence of subscribers if the announcement could be made that this volume will reach its completion within the current year.

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FUNGI MORICOLÆ (*A. N. Berlese*).—Part 2 is fully as meritorious in execution as the first part, and contains 10 plates, of which seven belong to the Pyrenomycetes. We can add nothing to our previous estimate.

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## BRITISH SPHÆROPSIDÆ.

## PROVISIONAL LIST OF SPECIES HITHERTO FOUND IN THE BRITISH ISLANDS.

BY M. C. COOKE.

(Continued from p. 36.)

199. **Diplodia amorphæ**, Wallr. Sacc. Syll. 1872.  
On *Amorpha fruticosa*. Kew.
200. **Diplodia Scheidweileri** (West) Sacc. Syll., 1830.  
On *Tilia*. Near Bristol (C.B.)
201. **Diplodia rosarum**, West. Sacc. Syll. 1877.  
On roses.
202. **Diplodia kerriæ**, Berk. Sacc. Syll. 1878.  
On *Kerria japonica*.
203. **Diplodia cistina**, Cke. Grev. XIV., 4.  
On *Cistus laurifolius*. Kew.
204. **Diplodia rubi**, Fr. Sacc. Syll. 1879.  
On bramble. Kent; King's Cliffe; Barnet.
205. **Diplodia Roumegueri**, Sacc. Syll. 1884.  
On *Prunus lauro-cerasus*. Kew.
206. **Diplodia cratægi**, West. Sacc. Syll. 1887.  
On *Crataegus*. Kent.
207. **Diplodia hederæ**, Fckl. Sacc. Syll. 1913.  
On twigs and leaves of ivy.
208. **Diplodia mamillana**, Fr. Sacc. Syll. 1914.  
On *Cornus*. Mickleham.
209. **Diplodia paupercula**, B. & Br. Sacc. Syll. 1916.  
On *Platanus*. Batheaston.
210. **Diplodia lonicerae**, Fckl. Sacc. Syll. 1919.  
On honeysuckle. Kew.
211. **Diplodia sambucina**, Sacc. Syll. 1921.  
On *Sambucus nigra*. Kew.
212. **Diplodia lantana**, Fckl. Sacc. Syll. 1923.  
On *Viburnum lantana*. Darenth (F. B. II., 620); Kew.
213. **Diplodia paulowniae**, Cke. Grev. XIII., 96.  
On *Paulownia imperialis*. Kew.
214. **Diplodia lilacis**, West. Sacc. Syll. 1928.  
On *Syringa vulgaris*. Shrewsbury (F. B. II., 626); King's Lynn.
215. **Diplodia ligustri**, West. Sacc. Syll. 1929.  
On *Ligustrum vulgare*. Darenth (F. B. II., 621); Forden; Kew; Highgate.
216. **Diplodia laurina**, Sacc. Syll. 1937.  
On *Laurus nobilis*. Kew.

217. **Diplodia elæagni**, Pass. *Sacc. Syll.* 1941.  
On *Elæagnus angustifolius*. Kew.
218. **Diplodia celtidis**, Roum. *Sacc. Syll.* 1944.  
On *Celtis occidentalis*. Kew.
219. **Diplodia melæna**, Lev. *Sacc. Syll.* 1946.  
On elm branches.
220. **Diplodia sycina**, Mont. *Sacc. Syll.* 1948.  
On *Ficus carica*. King's Cliffe.
221. **Diplodia mori**, West. *Sacc. Syll.* 1956.  
On *Morus alba*. Kew.
222. **Diplodia juglandis**, Fr. *Sacc. Syll.* 1962.  
On *Juglans regia*.
223. **Diplodia populina**, Fckl. *Sacc. Syll.* 1964.  
On *Populus nigra*.
224. **Diplodia mutila**, Fr. *Sacc. Syll.* 1965.  
On *Populus*. Kent; Shrewsbury.
225. **Diplodia coryli**, Fckl. *Sacc. Syll.* 1967.  
On *Corylus avellana*.
226. **Diplodia faginea**, Fr. *Sacc. Syll.* 1969.  
On *Fagus sylvatica*.
227. **Diplodia salicina**, Lev. *Ann. Sci. Nat.* 1846, 292.  
On *Salix*. Forden (F. B. II, 622).
228. **Diplodia juniperi**, West. *Sacc. Syll.* 1979.  
On Juniper. Stratford-on-Avon.
229. **Diplodia sapinea**, Fr. *Sacc. Syll.* 1984.  
On *Pinus*. Terrington (F. B. II, 17).
230. **Diplodia microsporella**, *Sacc. Syll.* 1986.  
On *Ligustrum*. Kew.

\*\* On leaves and fruits.

231. **Diplodia taxi**, Sow. *Sacc. Syll.* 1996.  
On yew leaves.
232. **Diplodia conigena**, Desm. *Sacc. Syll.* 1998.  
On cones of *Pinus sylvestris*. Minstead (New Forest).
233. **Diplodia ilicis**, Fr. *Sacc. Syll.* 2002.  
On holly leaves.
234. **Diplodia hedericola**, *Sacc. Syll.* 2004.  
On ivy leaves.
235. **Diplodia inconspicua**, Cooke. *Grev. XIII.*, 96.  
On box leaves. Kew.
236. **Diplodia consors**, B. & Br. *Sacc. Syll.* 2019.  
On leaves of cherry laurel. Forden.
237. **Diplodia tecta**, B. & Br. *Sacc. Syll.* 2020.  
On leaves of cherry laurel.
238. **Diplodia malorum**, Fr. *Sacc. Syll.* 2021.  
On apples. King's Cliffe.

239. **Diplodia magnoliæ**, West. *Sacc. Syll.* 2024.  
On twigs and leaves of *Magnolia grandiflora*. Kew.
240. **Diplodia arbuticola**, Fr. *Sacc. Syll.* 2028.  
On *Arctostaphylos uva ursi*. Scotland.

B. On herbaceous Dicotyledons.

241. **Diplodia sarmientorum**, Fr. *Sacc. Syll.* 2035.  
On *Menispermum canadense*. Kew.
242. **Diplodia humuli**, Fckl. *Sacc. Syll.* 2036.  
On *Humulus lupulus*.
243. **Diplodia dulcamarae**, Fckl. *Sacc. Syll.* 2044.  
On *Solanum dulcamara*.
244. **Diplodia obsoleta**, Karst. *Sacc. Syll.* 2045.  
On potato haulms. Aberdeen.
245. **Diplodia vulgaris**, Lev. *Sacc. Syll.* 2065.  
On herb stems.
246. **Diplodia herbarum**, Lev. *Sacc. Syll.* 2066.  
On *Lappa*, &c. Darenth (F. B. I., 339).
247. **Diplodia smyrnii**, Curr. in *Herb.*  
On *Smyrnium*. Lewes.

C. On Monocotyledons.

249. **Diplodia coryphæ**, Cooke. *Grev. XIII.*, 96.  
On petioles of palms.

GEN. 4. **MACRODIPLODIA**, *Sacc. Syll.* III., 374.

Perithecia covered, corticolous, large (resembling *Massaria*), pierced. Sporules oblong, uniseptate, sooty brown, surrounded by a hyaline mucous stratum.

248. **Macrodipodia Curreyi**, *Sacc. Syll.* 2089.  
On lime branches. Blackheath.
250. **Macrodipodia ulmi**, *Sacc. Syll.* 2090.  
On elm branches. Kidbrooke ; Jedburgh.

GEN. 5. **DIPLODIELLA**, Karst. *Sacc. Syll.* III., 375.

Perithecia superficial, usually growing on wood, globose, papillate, black, smooth, subcarbonaceous. Sporules elliptical or oblong, uniseptate, coloured.

251. **Diplodiella fibricola**, Berk. *Sacc. Syll.* 2097.  
On poplar wood. King's Cliffe.
252. **Diplodiella oospora**, Berk. *Sacc. Syll.* 2098.  
On willow wood. King's Cliffe.
253. **Diplodiella quercella**, *Sacc. Syll.* 2099.  
On oak wood. Shere.
254. **Diplodiella Cowdelli**, B. & Br. *Sacc. Syll.* 2105.  
On cotton cloth.

GEN. 6. **BOTRYDIPLODIA**, *Sacc. Syll. III.. 377.*

Perithecia cæspitose, crowded together in a botryoid manner, erumpent, seated upon a definite stroma, between membranaceous and carbonaceous, often papillate. Sporules as in *Diplodia*.

255. **Botrydiplodia confluens**, *B. & Br. Sacc. Syll. 2108.*

On *Daphne laureola*. Milton.

256. **Botrydiplodia fraxini**, *Fr. Sacc. Syll. 2110.*

On *Fraxinus excelsior*. Shrewsbury.

257. **Botrydiplodia sphæroides**, *Fr. Sacc. Syll. 2120.*

On *Fraxinus*. Shere.

258. **Botrydiplodia pyrenophora**, *Fr. Sacc. Syll. 2121.*

On pear and apple. King's Cliffe; Audley End.

GEN. 7. **DIPLODINA**, *West. Sacc. Syll. III., 411.*

Perithecia subcutaneous or erumpent, globose, papillate, black, smooth. Sporules ellipsoid-oblong, uniseptate, hyaline.

259. **Diplodina salicis**, *West. Sacc. Syll. 2267.*

On *Salix babylonica*. Kew.

260. **Diplodina deformis**, *Karst. Sacc. Syll. 2277.*

On *Sambucus*. Kew.

261. **Diplodina dracænicola**, *Sacc. Syll. 2279.*

On *Dracæna* leaves.

262. **Diplodina ammophilæ**, *Trail. Grev. XIII., 96.*

On *Ammophila*. Aberdeen.

*Sub-Fam. V. HENDERSONIÆ.*

Perithecia as in *Diplodiæ*; sporules two or multiseptate, coloured or hyaline.

GEN. 1. **HENDERSONIA**, *Berk. Sacc. Syll. III., 418.*

Perithecia subcutaneous, erumpent, or almost superficial, globose, papillate or depressed, membranaceous or subcarbonaceous, black. Sporules oblong or fusoid, 2 or many septate, olivaceous or sooty brown.

## I. Eu-HENDERSONIA. Sporules of medium size, or small.

\* *Ramicolæ.*

263. **Hendersonia vagans**, *Fckl. Sacc. Syll. 2290.*

On *Fraxinus*. Kew.

264. **Hendersonia sarmentorum**, *West. Sacc. Syll. 2293.*

On *Vitis*. King's Lynn (F. B. I., 623; II., 23).

265. **Hendersonia coronillæ**, *Cooke.*

On *Coronilla emerus*, and *Baccharis halimifolia*. Kew Gardens.

266. **Hendersonia mammillana**, *Curr. Sacc. Syll. 2296.*

On *Rhamnus*.

267. **Hendersonia rhamnicola**, *Cooke. Sacc. Syll. 2297.*

On *Rhamnus frangula*.

268. **Hendersonia Fiedleri**, West. *Sacc. Syll.* 2299.  
On *Cornus*. Highgate.
269. **Hendersonia loniceræ**, Fr. *Sacc. Syll.* 2309.  
On *Lonicera*. Kew.
270. **Hendersonia rubi**, West. *Sacc. Syll.* 2316.  
On *Rubus*.  
On *Rosa canina*. Kew.
271. **Hendersonia tiliæ**, Lev. *Sacc. Syll.* 2318.  
On *Tilia europaea*. Kew.
272. **Hendersonia ambiens**, Cooke. *Grev. XIV.*, 5.  
On *Acer dasycarpum*. Kew.
273. **Hendersonia tamaricis**, Cooke. *Grev. XIV.*, 5.  
On *Tamarix gallica*. Kew.
274. **Hendersonia exigua**, Cooke. *Sacc. Syll.* 2330.  
On bark. Edinburgh (F. B. II., 24).

\*\* *Herbicola*.

275. **Hendersonia lirella**, Cooke. *Sacc. Syll.* 2361.  
On *Spiraea ulmaria*.

\*\*\* On *Monocotyledons*.

276. **Hendersonia sparganii**, Niel. *Sacc. Syll.* 2377.  
On *Sparganium*. Aberdeen.
277. **Hendersonia culmicola**, Sacc. *Syll.* 2391.  
On culms of grass. Warwickshire.
278. **Hendersonia culmiseda**, Sacc. *Syll.* 2392.  
On *Phragmites*. Aberdeen.
279. **Hendersonia equiseti**, Trail. *Grev. XIII.*, 96.  
On *Equisetum*. Aberdeen.

## II. SPOROCADUS. Perithecia and sporules large.

280. **Hendersonia loricata**, S. & R. *Sacc. Syll.* 2410.  
On decorticated branches. Bristol.
281. **Hendersonia ulmicola**, Cke. *Sacc. Syll.* 2412.  
On *Ulmus*.
282. **Hendersonia polycystis**, B. & Br. *Sacc. Syll.* 2414.  
On *Betula*.

GEN. 2. **PROSTHEMIUM**, Kunze. *Sacc. Syll.* III., 444.

Perithecia covered, carbonaceous, globose-depressed, black. Sporules multiseptate, united in a stellate capitulum, coloured; basidia obsolete or filiform.

283. **Prosthemium betulinum**, Kunze. *Sacc. Syll.* 2430.  
On *Betula alba*. Blackheath. Wiltshire.
284. **Prosthemium stellare**, Riess. *Sacc. Syll.* 2431.  
On *Alnus glutinosa*. Spyne Park.

GEN. 3. **STAGONOSPORA**, *Sacc. Syll.* III., 445.

Perithecia innate or erumpent, globose, often papillate and pierced, black, membranaceous or subcarbonaceous. Sporules ellipsoid or elongated, 2 to many-septate, hyaline.

\* On *Dicotyledons*.

285. **Stagonospora turgida**, *B. & Br.* *Sacc. Syll.* 2439.  
On *Fraxinus*. Twycross.
286. **Stagonospora arcus**, *B. & Br.* *Sacc. Syll.* 2452.  
On *Buxus*. Batheaston.
287. **Stagonospora princeps** (*B. & Br.*). *Sacc. Syll.* 3171.  
On *Fagus*. Batheaston.
288. **Stagonospora unica**, *Cooke.* *Sacc. Syll.* 2454.  
On wood.
289. **Stagonospora strobilina**, *Curr.* *Sacc. Syll.* 2457.  
On cones of *Pinus maritima*.
290. **Stagonospora pini**, *Grove.* *Journ. Bot.*, 1885.  
. On leaves of *Pinus sylvestris*.

\*\* On *Monocotyledons*.

291. **Stagonospora typhoidearum**, *Desm.* *Sacc. Syll.* 2465.  
On *Typha* and *Sparganium*. Wiltshire.
292. **Stagonospora trimera**, *Cooke.* *Sacc. Syll.* 2469.  
On *Juncus maritima*.
293. **Stagonospora caricis** (*Oud.*). *Sacc. Syll.* 2471.  
On *Carices*. Aberdeen.
294. **Stagonospora macropus**, *B & Br.* *Sacc. Syll.* 2474.  
On *Carex*.
295. **Stagonospora paludosa**, *Sacc. Syll.* 2475.  
On *Carex*. Aberdeen.
296. **Stagonospora elaeochardis**, *Trail.* *Grev.* XIII., 97.  
On *Elaeocharis palustris*. Aberdeen.
297. **Stagonospora subseriata**, *Desm.* *Sacc. Syll.* 2478.  
On grasses. Wiltshire.
298. **Stagonospora elegans**, *Berk.* *Cooke, Handbook*, 1275.  
On reeds and grasses. Irstead ; Lyndhurst ; Northamptonshire.
299. **Stagonospora epicalamia**, *Cooke.* *Sacc. Syll.* 2487.  
On reeds. N. Wootton.

GEN. 4. **CAMAROSPORIUM**, *Schulz.* *Sacc. Syll.* III., 459.

Perithecia subcutaneous, erumpent, globose, black, often papillate, membranaceous or subcoriaceous. Sporules ovoid, oblong or fusoid, 2 to many septate, muriform, coloured.

\* On *Dicotyledons*.

*Ramicolæ*.

300. **Camarosporium robiniae**, *West.* *Sacc. Syll.* 2491.  
On *Robinia*. Swanscombe (F. B. I., 625).

301. **Camarosporium berberidis**, Cooke. *Grev. XIII.*, 97.  
On *Berberis vulgaris*. Kew.
302. **Camarosporium limoniæ**, Cooke. *Grev. XIII.*, 97.  
On *Citrus trifoliata*. Kew.
303. **Camarosporium macrosporum**, B. & Br. *Sacc. Syll.* 2501.  
On *Philadelphus*.
304. **Camarosporium spireæ**, Cooke. *Grev. XIII.*, 97.  
On *Spiræa callosa* and *S. opulifolia*. Kew.
305. **Camarosporium cistinum**, Cooke. *Grev. XIV.*, 5.  
On *Cistus laurifolius*. Kew.
306. **Camarosporium staphyleæ**, Cooke. *Grev. XIV.*, 5.  
On *Staphylea pinnata* and *S. trifoliata*. Kew.  
On *Celtis occidentalis*. Kew.
307. **Camarosporium quercus**, *Sacc. Syll.* 2515.  
On *Quercus coccinea*. Kew.
308. **Camarosporium mori**, *Sacc. Syll.* 2516.  
On *Morus alba*. Kew.

*Foliicolæ.*

309. **Camarosporium oreades**, D. R. & M. *Sacc. Syll.* 2526.  
On oak leaves.  
\*\* On *Monocotyledons* and *Acotyledons*.
310. **Camarosporium Stephensii**, B. & Br. *Sacc. Syll.* 2542.  
On *Pteris aquilina*. Leigh Wood.

GEN. 5. **DICHOMERA**, Cooke. *Sacc. Syll.* III., 472.

Perithecia immersed in a pulvinate erumpent Dothideaform stroma. Sporules globose or ellipsoid, 2-4 septate, muriform, or radiately or cruciately 3-6 septate, coloured.

311. **Dichomera Saubinetii** (*Mont.*). *Sacc. Syll.* 2547.  
On *Rhamnus frangula*. Highgate (F. B. II., 619).
312. **Dichomera salicina**, Vize. *Sacc. Syll.* 2549.  
On *Salix*. Forden.
313. **Dichomera mutabilis**, B. & Br. *Sacc. Syll.* 2550.  
On *Platanus*.

*Sub-Fam. VI. CYTISPOROIDEÆ.*

Stroma mostly verrucæform, many-celled within, perithecia formed from the stroma. Sporules unicellular, hyaline.

GEN. 1. **RABENHORSTIA**, Fr. *Sacc. Syll.* III., 243.

Stroma erumpent, globose, truncate, cellular within, coriaceous-carbonaceous, the upper portion often falling away with the bark. Sporules ovoid-oblong, continuous, hyaline.

314. **Rabenhorstia tiliæ**, Fr. *Sacc. Syll.* 1427.  
On lime branches.
315. **Rabenhorstia rufis**, Fr. *Sacc. Syll.* 1429  
On laburnum. Regent's Park.

GEN. 2. **PLACOSPHÆRIA**, *Sacc. Syll. III.*, 244.

Stroma effused, black, often covered by the epidermis, distinctly or obsoletely cellular within. Sporules oblong, fusoid, or cylindrical, hyaline.

316. **Placosphæria onobrychidis** (*D.C.*). *Sacc. Syll.* 1439.

On *Lathyrus*. Kew.

317. **Placosphæria corrugata**, *Karst.* *Sacc. Syll.* 1445.

On hard wood.

GEN. 3. **FUSICOCCUM**, *Corda.* *Sacc. Syll. III.*, 247.

Stroma subcutaneous, erumpent, convex or conical, subcoriaceous, black, more or less distinctly cellular within. Sporules fusoid, continuous, hyaline, usually straight.

318. **Fusicoccum fibrosum**, *Sacc. Syll.* 1447.

On *Rhamnus cathartica*.

319. **Fusicoccum hapalocystis**, *Sacc. Syll.* 1455.

On *Platanus*.

GEN. 4. **CYTISPORA**, *Fr.* *Sacc. Syll. III.*, 252.

Stroma covered or erumpent, conical or verruciform, cellular within, cells often distinctly circinating. Sporules numerous, continuous, hyaline, oblong, sausage-shaped, expelled when moist in tendrils.

\* *Ramicolous.*

320. **Cytispora Hendersonii**, *B. & Br.* *Sacc. Syll.* 1476.

On *Rosa arvensis*.

321. **Cytispora rhodophila**, *Sacc. Syll.* 1477.

On *Rosa canina*.

322. **Cytispora rosarum**, *Grev.* *Sacc. Syll.* 1478.

On *Rosa canina*.

323. **Cytispora microspora**, *Corda.* *Sacc. Syll.* 1480.

On *Amelanchier*. Kew.

324. **Cytispora rubescens**, *Fr.* *Sacc. Syll.* 1481.

On *Sorbus aucuparia*, &c. Forden, (F. B. II., 623.) King's Cliffe.

325. **Cytispora leucostoma**, *Pers.* *Sacc. Syll.* 1483.

On *Prunus domestica*, &c.

326. **Cytispora microstoma**, *Sacc. Syll.* 1486.

On *Prunus spinosa*.

327. **Cytispora atra**, *Bon.* *Sacc. Syll.* 1504.

On *Morus alba*. Kew.

328. **Cytispora occulta**, *Sacc. Syll.* 1509.

On *Alnus glutinosa*. Regent's Park.

329. **Cytispora stellulata**, *Sacc. Syll.* 1516.

On *Ulmus campestris*.

330. **Cytispora carbonacea**, *Fr.* *Sacc. Syll.* 1517.

On *Celtis occidentalis*. Kew.

331. **Cytispora nivea**, Hoffm. Sacc. Syll. 1518.  
On *Populus nigra*, &c.
332. **Cytispora chrysosperma**, Pers. Sacc. Syll. 1519.  
On *Populus alba*, &c. Highgate (F. B. II., 113); Shrewsbury; King's Cliffe; Glasgow.
333. **Cytispora translucens**, Sacc. Syll. 1522.  
On *Salix babylonica*.
334. **Cytispora Schweinitzii**, Sacc. Syll. 1523.  
On *Salix fragilis* and *S. petiolaris*. Kew.
335. **Cytispora salicis**, Rabh. Sacc. Syll. 1526.  
On *Salix vitellina*, *S. alba*, and *S. fragilis*. Kew.
336. **Cytispora capreæ**, Fckl. Sacc. Syll. 1530.  
On *Salix caprea*.
337. **Cytispora fugax**, Fr. Sacc. Syll. 1532.  
On *Salix*. Darenth (F. B. II., 115).
338. **Cytispora decipiens**, Sacc. Syll. 1534.  
On *Carpinus*.
339. **Cytispora guttifera**, D.C. Sacc. Syll. 1539.  
On *Corylus* and *Quercus*.
340. **Cytispora intermedia**, Sacc. Syll. 1540.  
On *Quercus*. Kew.
341. **Cytispora platani**, Fckl. Sacc. Syll. 1557.  
On *Platanus*. Kew.
342. **Cytispora leucosperma**, Fr. Sacc. Syll. 1561.  
On various trees. Highgate (F. B. II., 114); Shrewsbury; King's Cliffe.
343. **Cytispora Acharii**, Sacc. Syll. 1559.  
On decorticated branches.
344. **Cytispora flavovirens**, Sacc. Syll. 1560.  
On *Acer*, &c. Kew.
345. **Cytispora ceratophora**, Sacc. Syll. 1562.  
On *Quercus*, *Ulmus*, &c. Whitehall; Kew.
346. **Cytispora ambiens**, Sacc. Syll. 1563.  
On *Fraxinus*, *Betula*, *Negundo*, &c. Kew.
347. **Cytispora Curreyi**, Sacc. Syll. 1566.  
On *Abies*, *Larix*, &c.
348. **Cytispora abietis**, Sacc. Syll. 1567.  
On *Abies excelsa*.
349. **Cytispora Kunzei**, Sacc. Syll. 1569.  
On *Abies pectinata* and *A. excelsa*.
350. **Cytispora pini**, Desm. Sacc. Syll. 1571.  
On *Pinus sylvestris*. Twycross.
351. **Cytispora carphosperma**, Fr. Sacc. Syll. 1504.  
On *Tilia*. Blackheath.
352. **Cytispora hippophaes**, Thum. Sacc. Syll. 1597.  
On *Hippophae rhamnoides*. Kew.

353. **Cytispora euonymi**, Cke. *Grev. XIV.*, 4.  
On *Euonymus americanus*. Kew.
354. **Cytispora staphyleæ**, Cooke. *Grev. XIV.*, 4.  
On *Staphylea pinnata* and *S. trifoliata*. Kew.
355. **Cytispora jasmini**, Cooke. *Grev. XIV.*, 4.  
On *Jasminum officinale*. Kew.  
\*\* *Foliicolous*.
356. **Cytispora pinastri**, Fr. *Sacc. Syll. 1599*.  
On leaves of *Pinus sylvestris*, &c.
357. **Cytispora foliicola**, Lib. *Sacc. Syll. 1602*.  
On leaves of *Vinca*. Aberdeen; Swanscombe.
358. **Cytispora lauro-cerasi**, Fckl. *Sacc. Syll. 1603*.  
var. *xamulorum*, Sacc.  
On twigs of cherry laurel. Kew.
359. **Cytispora palmarum**, Cooke. *Grev. XIV.*  
On palm petioles. Kew.

GEN. 5. **CEUTHOSPORA**, *Grev. Sacc. Syll. III.*, 277.

Stroma innato-erumpent, conical-truncate, subcoriaceous, cellular within (rarely 1-celled); ostiola often confluent in the centre. Sporules oblong-cylindrical, usually straight, hyaline, oozing out in tendrils.

360. **Ceuthospora phacidoides**, *Grev. Sacc. Syll. 1618*.  
On holly leaves. Highgate (F. B. I., 158); Shrewsbury; Edinburgh; Bungay; Neatishead.
361. **Ceuthospora lauri**, *Grev. Sacc. Syll. 1628*.  
On *Laurus nobilis*. Appin; Audley End; Forden; Northamptonshire.

GEN. 6. **ERIOSPORA**, *B. & Br. Sacc. Syll. III.*, 600.

Stroma depressed, multicellular within, cells subglobose. Sporules fasciculate, in fours or sixes, filiform, continuous, hyaline, seated on a short common sporophore, at length ejected from a common orifice.

362. **Eriospora leucostoma**, *B. & Br. Sacc. Syll. 3260*.  
On dead leaves of *Typha* and *Carex*.

GEN. 7. **CYTISPORINA**, *Sacc. Syll. III.*, 601.

Stroma valsioid, verruciform, or effused, on bark or wood; perithecia subimmersed, ostiola various, often emergent. Sporules filiform, curved, hyaline, continuous.

363. **Cytisporina stellulata**, *Sacc. Syll. 3268*.  
On branches of *Ulmus*.

GEN. 8. **MICROPERA**, *Lev. Sacc. Syll. III.*, 604.

Perithecia erumpenti-superficial, often densely cæspitose, suberous, or coriaceous, sometimes furfuraceous, globosely conic or somewhat elongated, ostiola spurious. Sporules fusoid-filiform, flexuous or curved, multiguttulate, hyaline, on short pedicels.

364. **Micropora drupacearum**, Lev. *Sacc. Syll.* 3281.

On bark of *Prunus* and *Cerasus*. Forden (F. B. II., 618).

*Sub-Fam. 7. PHYLLOSTICTEÆ.\**

Epiphyllous, or chiefly so. Perithecia membranaceous, gregarious (often on definite spots), naked, opening by a pore. Sporules hyaline, continuous or septate.

- GEN. 1. **PHYLLOSTICTA**, Pers. *Sacc. Syll.* III., 3.

Perithecia membranaceous, lenticular, covered by the cuticle, pierced with a punctiform pore. Sporules ovoid or oblong, continuous, hyaline, basidia very short or none.

\* *On Arborescent Dicotyledons.*

365. **Phyllosticta paviae**, Desm. *Sacc. Syll.* 2.

On *Pavia macrostachya*. Kew.

366. **Phyllosticta sanguinea**, Desm. *Sacc. Syll.* 14.

On *Cotoneaster frigida*. Kew.

367. **Phyllosticta ruborum**, *Sacc. Syll.* 30.

On *Rubus*. Forden; Lyndhurst.

368. **Phyllosticta rosæ**, Desm. *Sacc. Syll.* 31.

On rose leaves. Neatishead.

369. **Phyllosticta cytisi**, West. *Sacc. Syll.* 40.

On laburnum. Highgate; Shere.

370. **Phyllosticta aceris**, *Sacc. Syll.* 61.

On *Acer campestris*. Darenth.

371. **Phyllosticta rhamni**, West. *Sacc. Syll.* 62.

On *Rhamnus frangula*. Lyndhurst.

372. **Phyllosticta euonymi**, *Sacc. Syll.* 68.

On *Euonymus europaeus*. Kew.

373. **Phyllosticta tinea**, *Sacc. Syll.* 75.

On *Viburnum tinus*. Kew.

374. **Phyllosticta ribicola**, Fr. *Sacc. Syll.* 82.

On *Ribes rubrum*.

375. **Phyllosticta lauri**, West. *Sacc. Syll.* 84.

On *Laurus nobilis*. Swanscombe; Highgate.

376. **Phyllosticta vulgaris**, Desm. *Sacc. Syll.* 90.

On honeysuckle. Ashmanhaugh; Shrewsbury; Twycross; Chingford.

377. **Phyllosticta loniceræ**, West. *Sacc. Syll.* 90.

On honeysuckle. Darenth; Tay, N.B.

378. **Phyllosticta sambuci**, Desm. *Sacc. Syll.* 95.

On *Sambucus*. Shere; Whitehall.

379. **Phyllosticta hedericola**, D.R. & M. *Sacc. Syll.* 100.

On ivy leaves. Highgate; Shrewsbury; Lyndhnrst.

\* This sub-family would have been better placed first, preceding *Phomideæ*.

380. **Phyllosticta cornicola**, D.C. *Sacc. Syll.* 103.  
On *Cornus*. King's Cliffe; Darenth; Chichester; Audley End.
381. **Phyllosticta fraxinicola**, *Curr. Sacc. Syll.* 106.  
On *Fraxinus*. Herb. Currey.
382. **Phyllosticta ligustri**, *Sacc. Syll.* 107.  
On privet leaves. Highgate; Shere; Kew.
383. **Phyllosticta syringæ**, West. *Sacc. Syll.* 109.  
On *Syringa vulgaris*. Kew.
384. **Phyllosticta phillyreae**, *Sacc. Syll.* 113.  
On *Phillyrea*. Kew.
385. **Phyllosticta rhododendri**, West. *Sacc. Syll.* 116.  
On rhododendron. Kew.
386. **Phyllosticta arbuti**, Desm. *Sacc. Syll.* 118.  
On *Arbutus unedo*. Highgate; Swanscombe; Kew.
387. **Phyllosticta garryæ**, C. & H. *Sacc. Syll.* 121.  
On *Garrya elliptica*. Kew.
388. **Phyllosticta limbalis**, Pers. *Sacc. Syll.* 124.  
On box leaves. Forden; Shere.
389. **Phyllosticta Bolleana** (*Thum.*). *Sacc. Syll.* 620.  
On *Hoya carnosa*. Neatishead.
390. **Phyllosticta ilicicola**, Fr. in *Mong. & Nest. Exs.* 975.  
On holly leaves. Kew.
391. **Phyllosticta magnoliæ**, var. **Cookei**, *Sacc. Syll.* 130.  
On *Magnolia grandiflora*. Kew.
392. **Phyllosticta mahoniæ**, *Sacc. & Sp. Sacc. Syll.* 131.  
On *Mahonia aquifolia*. Swanscombe; Kew; Shere.
393. **Phyllosticta berberidis**, West. *Sacc. Syll.* 134.  
On *Berberis vulgaris*. Darenth.
394. **Phyllosticta asiatica**, Cooke. *Grev. XIII.*, 91.  
On *Berberis asiatica*. Kew.
395. **Phyllosticta paulowniæ**, *Sacc. Syll.* 139.  
On *Paulownia imperialis*. Kew.
396. **Phyllosticta tiliæ**, *Sacc. & Sp. Sacc. Syll.* 141.  
On *Tilia europaea*. Lyndhurst.
397. **Phyllosticta sidæcola**, Cooke. *Grev. XIV.*, 39.  
On *Sida mepœa*. Kew.
398. **Phyllosticta betulina**, *Sacc. Syll.* 170.  
On *Betula alba*. Wimbledon; Kew; Rednal; Fen End.
399. **Phyllosticta populina**, *Sacc. Syll.* 176.  
On *Populus nigra*. Holloway.
400. **Phyllosticta maculæformis**, *Sacc. Syll.* 189.  
On *Castanea vesca*. Darenth.

\*\* *On Herbaceous Dicotyledons.*

401. **Phyllosticta ranunculorum**, *Sacc. Syll.* 197.  
On *Ranunculus repens*. Abridge.
402. **Phyllosticta calthæcola**, D.C. *Sacc. Syll.* 348.  
On *Caltha palustris*. Colney Hatch.

403. **Phyllosticta helleborella**, Sacc. Syll. 201.  
var. **nigra**, Cooke.  
On *Helleborus niger*. Kew.
404. **Phyllosticta violæ**, Desm. Sacc. Syll. 203.  
On *Viola odorata*. Hampstead.
405. **Phyllosticta helianthemi**, Roum. Sacc. Syll. 204.  
On *Helianthemum vulgare*. Lyndhurst.
406. **Phyllosticta brassicæ**, Curr. Sacc. Syll. 207.  
On *Brassica*. Kew.
407. **Phyllosticta erysimi**, West. Sacc. Syll. 208.  
On *Erysimum alliaria*. Shere.
408. **Phyllosticta epimedii**, Sacc. Syll. 211.  
On *Epimedium alpinum*. Kew.
409. **Phyllosticta impatientis**, Kirch. Sacc. Syll. 346.  
On *Impatiens parviflora*. Kew.
410. **Phyllosticta destructiva**, Desm. Sacc. Syll. 214.  
On *Malva sylvestris*. Dartford; Kew; Lyndhurst.
411. **Phyllosticta tormentillæ**, Sacc. Syll. 216.  
On *Tormentilla erecta*. Lyndhurst.
412. **Phyllosticta argentinæ**, Desm. Sacc. Syll. 218.  
On *Potentilla anserina*. Twycross.
413. **Phyllosticta fragaricola**, Desm. Sacc. Syll. 219.  
On strawberry leaves. Forden; Highgate.
414. **Phyllosticta filipendulina**, v. **ulmariae**, Sacc. Syll. 222.  
On *Spiraea ulmaria*. Lyndhurst.
415. **Phyllosticta medicaginis**, Fckl. Sacc. Syll. 228.  
On *Medicago sativa*. Dartford.
416. **Phyllosticta viciæ**, Lib. Sacc. Syll. 232.  
On *Vicia sepium*. Sydenham.
417. **Phyllosticta dianthi**, West. Sacc. Syll. 237.  
On *Dianthus barbatus*. In gardens.
418. **Phyllosticta cirsii**, Desm. Sacc. Syll. 238.  
On *Cirsium lanceolatum*. Bungay.
419. **Phyllosticta lappæ**, Sacc. Syll. 242.  
On *Lappa*. Almond park, Salop.
420. **Phyllosticta angelicæ**, Sacc. Syll. 252.  
On *Angelica sylvestris*. Highgate.
421. **Phyllosticta scrophulariæ**, West. Sacc. Syll. 253.  
On *Scrophularia*. Dinmore.
422. **Phyllosticta digitalis**, Belly. Sacc. Syll. 256.  
On *Digitalis*. Shere; Lyndhurst.
423. **Phyllosticta dulcamarae**, Sacc. Syll. 268.  
On *Solanum dulcamara*. Kew.
424. **Phyllosticta glechomæ**, Sacc. Syll. 270.  
On *Glechoma hederacea*. Lyndhurst; Kew.
425. **Phyllosticta ajugæ**, Sacc. & Sp. Sacc. Syll. 276.  
On *Ajuga reptans*. Lyndhurst.

426. **Phyllosticta plantaginis**, Sacc. Syll. 290.  
On *Plantago major*. Kew; Shere; Swanscombe.
427. **Phyllosticta mercurialis**, Desm. Sacc. Syll. 291.  
On *Mercurialis*. Darenth.
428. **Phyllosticta humuli**, Sacc. & Sp. Sacc. Syll. 293.  
On *Humulus lupulus*. Swanscombe.
429. **Phyllosticta aizoon**, Cooke. Grev. XIV., 39.  
On *Sedum aizoon*. Kew.
430. **Phyllosticta atriplicis**, Desm. Sacc. Syll. 299.  
On *Atriplex*.
431. **Phyllosticta polygonorum**, Sacc. Syll. 300.  
On *Polygonum persicaria*. Irstead.
432. **Phyllosticta podophylli**, Curt. Sacc. Syll. 305.  
On *Podophyllum peltatum*. Kew.
433. **Phyllosticta primulicola**, Desm. Sacc. Syll. 308.  
On *Primula*. Shrewsbury; Forden; Highgate; Mickleham;  
Shere; Ascot; Darenth; Irstead.
434. **Phyllosticta lutetiana**, Sacc. Syll. 309.  
On *Circea lutetiana*. Kew; Dinmore.
435. **Phyllosticta hydrophila**, Speg. Sacc. Syll. 310.  
On *Nymphaea alba*. Kew.

\*\* On Monocotyledons and Acotyledons.

436. **Phyllosticta ruscicola**, Desm. Sacc. Syll. 319.  
On *Ruscus aculeatus*. Swanscombe; Kew.
437. **Phyllosticta cruenta**, Fr. Sacc. Syll. 324.  
On *Convallaria*. Milton, Norths.
438. **Phyllosticta alismatis**, Sacc. & Sp. Sacc. Syll. 332.  
On *Alisma plantago*. Epping Forest.
439. **Phyllosticta sagittariæ**, Rabh. Sacc. Syll. 373.  
On *Sagittaria*. Bungay; Irstead.
440. **Phyllosticta potamia**, Cooke. Grev., XIV., 39.  
On *Potamogeton*. Lyndhurst; Epping Forest,

GEN. 2. **ASTEROMA**, D.C. Sacc. Syll. III., 201.

Perithecia minute, seated usually on radiating black fibrils.  
Sporules ovoid-oblong.

A. EU-ASTEROMA. Perithecia and sporules known.

441. **Asteroma padi**, Grev. Sacc. Syll. 1201.  
On leaves of *Prunus padus*. Edinbro'; Arisaig; Tay; Dee;  
Moray (N.B.).

B. ASTEROMATA DUBIA. Sporules unknown.

\* On woody Dicotyledons.

442. **Asteroma vagans**, Desm. Sacc. Syll. 1217.  
On leaves of various trees.
443. **Asteroma pyri**, Desm. Sacc. Syll. 1219.  
On pear leaves. King's Cliffe.

444. **Asteroma aceris**, Rob. *Sacc. Syll.* 1234.  
On maple leaves. Darenth.
445. **Asteroma obscurum**, Desm. *Sacc. Syll.* 1236.  
On leaves of *Cornus*. Dartford.
446. **Asteroma betulae**, Rob. *Sacc. Syll.* 1241.  
On leaves of *Betulus*. Wimbledon.
447. **Asteroma salicis**, Rob. *Sacc. Syll.* 1244.  
On willow leaves. Audley End.
448. **Asteroma ulmi**, Klot. *Sacc. Syll.* 1248.  
On elm leaves. Darenth; Highgate; North Highlands;  
Sanquhar; Aberdeen.
449. **Asteroma hederæ**, Desm. *Exs.* No. 774.  
On ivy leaves.

\*\* *On herbaceous Dicotyledons.*

450. **Asteroma graphoides**, Rob. *Sacc. Syll.* 1250.  
On leaves of *Stellaria holostea*.
451. **Asteroma prunellæ**, Purt. *Sacc. Syll.* 1257.  
On *Prunella*. Bagley Wood, Berks; Shotover Hill.
452. **Asteroma Robergei**, Desm. *Sacc. Syll.* 1258.  
On *Conium*. King's Cliffe.
453. **Asteroma solidaginis**, Cooke. *Grev. XIV.*, 40.  
On *Solidago elliptica*. Kew.

\*\* *On fruits and galls.*

454. **Asteroma delicatulum**, Desm. *Sacc. Syll.* 1277.  
On *Colutea arborescens*. Kew.

\*\* *On Monocotyledons.*

455. **Asteroma reticulatum**, D.C. *Sacc. Syll.* 1280.  
On *Convallaria*. King's Cliffe.

#### C. ACTINONEMA, Fr. Sporidia septate.

456. **Asteroma roseæ**, Lib. *Sacc. Syll.* 2257.  
On rose leaves. Neatishead; Shrewsbury; Forden; Twycross;  
King's Cliffe; Highgate; Bristol; Ascot; Chingford;  
Lyndhurst; Tay; Moray.
457. **Asteroma crataegi** (?), Berk. *Sacc. Syll.* 2258.  
On pear leaves. King's Cliffe; Tonbridge.

#### GEN. 3. **DARLUCA**, Cast. *Sacc. Syll.* III., 410.

Perithecia superficial, usually parasitic on the sori of Uredines.  
Sporules oblong or fusoid, at length uniseptate, apiculate.

458. **Darluca filum**, Cast. *Sacc. Syll.* 2263.  
On *Uredines*. King's Lynn; King's Cliffe; Twycross.

#### GEN. 4. **ASCOCHYTA**, Lib. *Sacc. Syll.* III., 384.

Perithecia as in *Phyllosticta*. Sporules uniseptate.

459. **Ascochyta metulispora**, B. & Br. *Sacc. Syll.* 2134.  
On ash leaves. Scotland.

460. **Ascochyta rufomaculans**, Berk. *Sacc. Syll.* 2183.  
On *Vitis vinifera*.
461. **Ascochyta armoraciæ**, Fckl. *Sacc. Syll.* 2194.  
On horseradish leaves.
462. **Ascochyta pisi**, Lib. *Sacc. Syll.* 2197.  
On pods of common pea. King's Cliffe ; Glamis.
463. **Ascochyta dianthi**, A. & S. *Sacc. Syll.* 2203.  
On *Agrostemma* and *Dianthus*. King's Cliffe ; London ; Tansor ; Neatishead ; Appin ; Perth.
464. **Ascochyta pallor**, Berk. *Sacc. Syll.* 2206.  
On bramble shoots. King's Cliffe.
465. **Ascochyta teretiuscula**, Sacc. & Roum. *Sacc. Syll.* 2243.  
On *Luzula sylvatica*. Aberdeen.

GEN. 4. **SEPTORIA**, Fr. *Sacc. Syll.* III., 474.

Perithecia commonly seated on discoloured spots, membranaceous. Sporules rod-like, or filiform, many-septate, or many-nucleate, hyaline.

A. On woody Dicotyledons.

466. **Septoria tiliæ**, West. *Sacc. Syll.* 2562.  
On lime leaves. Ascot.
467. **Septoria incondita**, Desm. *Sacc. Syll.* 2576.  
On maple leaves.
468. **Septoria æsculi**, Lib. (*S. hippocastani*, B. & Br.) *Sacc. Syll.* 2578, 2579.  
On horse-chestnut leaves. Albury ; Audley End ; Kew ; Dun.
469. **Septoria Badhami**, B. & Br. *Sacc. Syll.* 2581.  
On vine leaves. Shere ; Twycross.
470. **Septoria robiniae**, Desm. *Sacc. Syll.* 2609.  
On *Robinia* leaves.
471. **Septoria cytisi**, Desm. *Sacc. Syll.* 2611.  
On laburnum leaves. Highgate.
472. **Septoria rosarum**, West. *Sacc. Syll.* 2617.  
On rose leaves. Forden ; Shere ; Tay ; Dee.
473. **Septoria rubi**, West. *Sacc. Syll.* 2619.  
On bramble leaves. Forden ; Lyndhurst.
474. **Septoria pyricola**, Desm. *Sacc. Syll.* 2624.  
On apple and pear leaves. Shrewsbury ; Shobden ; Shere.
475. **Septoria hederæ**, Desm. *Sacc. Syll.* 2644.  
On ivy leaves. Shrewsbury ; East Bergholt ; Stratford-on-Avon ; Tweed ; Tay ; Dee ; Moray ; Solway ; Clyde ; Ross (N.B.).
476. **Septoria insularis**, B. & Br. *Sacc. Syll.* 2646.  
On ivy leaves.
477. **Septoria ribis**, Desm. *Sacc. Syll.* 2649.  
On black currant leaves. King's Cliffe ; Norfolk ; Tay.
478. **Septoria cornicola**, Desm. *Sacc. Syll.* 2652.  
On *Cornus* leaves. Darenth ; Kew.

# Grevillea,

A QUARTERLY RECORD OF CRYPTOGAMIC BOTANY  
AND ITS LITERATURE.

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PRÆCURSORES AD MONOGRAPHIA POLYPORORUM.

(Continued from page 21.)

GEN. III. **POLYSTICTUS.** *Fr. Nova Symb.* 54.

Pileus coriaceus, inodermeus; strato intermedio fibrilloso, abeunte in hymenophorum, in quo pori successive a centro versus ambitum explicati; primitus superficiales, punctiformes, discreti, aperti, dein excavati congesti porosi, et pilei substantia verticaliter oppositi, trama ab hymenophoro formata. *Vegetatio concentrica, zonata.*

**A. Perennes.** Mesopodes vel pleuropodes, stipite anodermeo, contextu sporisque sub-ferrugineis. Stipes saepè lateralis.

- 573 circinatus, *Fr. Hym. Eur.* 530.  
= *dualis*, Peck, 30th Report, N.Y., 44.
- 574 tomentosus, *Fr. Hym. Eur.* 530.
- 575 Cumingii, *Berk. Hook. Journ.* 1842, 147.
- 576 Montagnei, *Fr. Hym. Eur.* 530.
- 577 luteo-nitidus, *Berk. Hook. Journ.* 1856, 175.
- 578 flavidus, *Peck 26th Report N. Y. Mus.* 68.
- 579 Kalchbrenneri, *Fr. Hym. Eur.* 531.
- 580 concinnus, *Fr. Epicr.* 436.
- 581 perennis, *Fr. Hym. Eur.* 531.
- 582 pictus, *Schulz. Sturg.* 485.
- 583 oblectans, *Berk. Hook. Journ.* 1845, 51.  
= *splendens*, Peck, 26th Report, 68.
- 584 bulbipes, *Fr. Plant Preiss.* 135.  
= *cladonia*, Berk. *Hook. Journ.* 1845, 51.  
= *perdurans*, Kalch. *Grev. ix.* 1.
- 585 fragilissimus, *Mont. Syll.* 163.
- 586 parvulus, *Klot. Linn.* 1833, 483.  
= *connatus*, *Schwz. Amer. Bor.* 330.  
= *focicola*, *B. & C. Linn. Journ.* x. 305.
- 587 substriatus, *Rostk. t.* 9.

- 588 peronatus (*Schulz.*), *Fr. Hym Eur.* 532.  
 589 carbonarius, *Fr. Hym. Eur.* 532.  
 590 salpinctus, *Cooke Grev.* viii. 142.  
 591 dependens, *B. & C. Grev.* i. 39.

**B. Sacri.** Pileus coriaceus vel papyraceus, aridus, zonatus.  
 Stipes crustaceo-coriocatus.—*Hornotini*, *Fr. Epic.* 436.

- 592 sacer, *Fr. Epicr.* 436.  
 593 pulcher, *Fr. Epicr.* 437.  
 594 renatus, *Berk. Hook. Journ.* 1856, 170.  
 595 partitus, *Berk. Hook. Journ.* 1856, 170.  
 596 parvula, *Berk. Hook. Journ.* 1856, 173.  
 597 marasmoides, *Berk. Hook. Journ.* 1856, 175.  
     var. setipes, *Berk. Hook. Journ.* 1856, 175.  
 598 passerinus, *Berk. Hook. Journ.* 1856, 175.  
 599 perula, *Fr. Epicr.* 437.  
 600 incontus, *Fr. Epicr.* 437.  
 601 quadrans, *B. & Br. Trans. Linn. Soc.* i. 400.  
 602 xanthopus, *Fr. Epicr.* 473.  
     = *cupreo-nitens*, *Kalch. Myc. Univ.* 1702.  
     = *crassipes*, *Curr. Linn. Trans.* 1876, 122.  
 603 florideus, *Berk. Hook. Journ.* 1852, 137.

**C. Discipedes.** Pileus coriaceus, subreniformis, zonatus, stipite laterali (saepè elongato), vulgo brevissimo, basi scutato-dilatato.

\* DILATATI. *Pileo sicco.*

- 604 siennæcolor, *Berk. in Herb.*  
 605 flabelliformis (*Klotzsch.*), *Fr. Epicr.* 444.  
 606 porphyrites, *Berk. Hook. Journ.* 1856, 196.  
 607 Adami, *Berk. in Cooke Enum. Poly.* 137.  
     = *dilatatus*, *Berk. Hook. Journ.* 1846.  
 608 dilatatus *Lev. Ann. Sci. Nat.* 1844, 184.  
 609 mutabilis, *B. & C. Grev.* i. 38.  
 610 dealbatus, *Rav. Fungi Car.* iii. 10.  
     = *Ravenalii*, *B. & C. Grev.* i. 38.  
 611 xerophyllus, *Berk. Fl. N. Zeal.* ii. 178.  
 612 luteus, *Nees. Nova Acta. N. C.* xiii., t. 4, f. 2.  
 613 petaliformis, *B. & C. Linn. Journ.* x, 307.  
 614 polygrammus, *B. & C. Linn. Journ.* x. 307.  
 615 vernicipes, *Berk. Linn. Journ.* xvi. 50.  
 616 carneo-niger, *Berk. Grev.* xii. 15.  
 617 nephridius, *Berk. Hook. Journ.* 1856, 195.  
 618 stereoides, *Berk. in Herb.* 2448.  
 619 affinis (*Nees.*), *Fr. Epic.* 445.  
     = *Teysmanni*, *Berk. in Herb.* 2424.  
 620 caryophyllaceus, *B. & C. in Herb.* *Berk.* 2407.  
 621 gallinaceus, *B. & Cke. Linn. Journ.* xv. 379.  
 622 spathulatus (*Hook.*), *Fr. Epic.* 443.

- 623 squamæformis, *Berk. Hook. Journ.* 1852, 139.  
 624 manubriatus, *Lev. Zoll. Verz.* 17.  
 625 intonsus, *Berk. Fl. Tasm.* ii. 25.  
 626 crenatus, *Berk. Ann. Nat. Hist.* x. 372.  
 627 unguicularis, *Fr. Nova Symb.* 60.  
 628 microloma, *Lev. Ann. Sci. Nat.* 1844, 183.  
 629 pterygodes, *Fr. Epic.* 445.  
 630 nephelodes, *Lev. Ann. Sci. Nat.* 1846, 125.  
 631 lacerus, *Jungh. Fl. Java.*  
 632 multiformis, *Mont. Syll.* 156.  
 633 cinerascens, *Lev. Ann. Sci. Nat.* 1844, 184.  
     = *Leveillei*, Cooke *Enum. Poly.* 144.  
 634 sideroides, *Lev. Ann. Sci. Nat.* 1844, 182.  
 635 Blumei, *Lev. Ann. Sci. Nat.* 1844, 185.  
 636 notopus, *Lev. Ann. Sci. Nat.* 1844, 194.  
 637 ostreatus, *Lev. Ann. Sci. Nat.* 1846, 128.  
 638 brachypus, *Lev. Ann. Sci. Nat.* 1846, 127.  
 639 lenziteus, *Lev. Zoll. Verz.* 17.  
 640 asper, *Jungh. Fl. Java* 60.  
 641 cycliscus, *Mont. Syll.* 164.  
 642 virgineus, *Fr. Epic.* 481.  
     = *conchifer*, Schw. *Syn. Car.* 918.  
 643 ochrotinctus, *B. & C. Amer. Acad.* iv. 122.  
 644 albo-cervinus, *Berk. Hook. Journ.* 1856, 234.  
 645 Dietrichseni, *Fr. Nova Symb.* 60.  
 646 cervino-nitens, *Schwz. Ann. Nat. Hist.* xii. 433.  
 647 Baurii, *Kalch. Grev.* x. 53.  
 648 brunneolus, *Berk. Hook. Journ.* iii. 187.  
 649 modestus (*Kunze.*), *Fr. Epic.* 444.  
 650 Menziesii, *Berk. Linn. Journ.* xiv. 46.  
 651 murinus, *Lev. Ann. Sci. Nat.* 1844, 185 (? = 648).  
 652 microcyclus, *Lev. Ann. Sci. Nat.* 1844, 188.  
 653 malaiensis, *Cooke Grev.* xiv. 13.  
 654 discipes, *Berk. Hook. Journ.* 1847, 499.  
 655 peroxydatus, *Berk. Linn. Journ.* xvi. 38.  
 656 Königii, *Berk. Ann. Nat. Hist.* 1843, 373.  
 657 meleagris, *Berk. Linn. Journ.* xvi. 42.  
 658 Hostmanni, *Berk. Hook. Journ.* 1842, 138.  
     = *inconspicuus*, Miq. *Bull. Neerl.* (1839), 454.  
 659 confundens, *Ces. Fung. Born.*  
 660 brachyporus, *Mont. Syll.* 164.  
 661 nepalensis, *Berk. Hook. Journ.* 1852, 162.  
 662 libum, *Berk. Linn. Journ.* xiii. 163.  
 663 sanguineus, *Fr. Epicr.* 444 (not 127).  
 664 regius, *Miq. Tidjsch. Wis. Amst.* 1851, 191.

\*\* HYDROPHILI. *Pileo hygrophani, siccitate incurvo.*

- 665 russogramme, *Berk. Linn. Journ.* xvi. 45.  
 666 rasipes, *Berk. Linn. Journ.* xvi. 49.

- 667 hydrophilus, *B. & C. Linn. Journ.* x. 306.  
 668 rigescens, *Cooke Grev.* xiv. 12.

**D. Prolificantes.** Pileus coriaceus, tenuis, plus minus prolificanti, multiplex in stipitem indefinitum (subinde deficiente) plus minus protractus.

- 669 prolificans, *Fr. Epic.* 443.  
 670 xalapensis, *Berk. Hook. Journ.* i. 103.  
 671 laceratus, *Berk. Ann. Nat. Hist.* 1839, 392.  
 672 elongatus, *Berk. Hook. Journ.* 1842, 149.  
     = *Hodgkinsoniae*, Kalch. *Grev.* x. 96.  
 673 nilgherrensis, *Mont. Ann. Sci. Nat.* 1842, 22.  
 674 ornithorhynchi, *Kalch. Grev.* x. 96.  
 675 Kurzianus, *Cooke MSS.*  
     = *submembranaceus*, *Berk. Herb. No.* 2796.  
 676 multilobus, *Kalch. Grev.* x. 96.  
 677 ilicincola, *B. & C. in Rar. Fungi Car.* v. 17.  
 678 Friesii (*Klotzsch.*), *Fr. Epic.* 480.  
 679 Fockei, *Miq. Tidj. Wetens.* 1851, 190.  
 680 radiato-rugosus, *Berk. Ann. Nat. Hist.* iii. 323.  
 681 flabellum, *Mont. Cuba.* t. xv. f. 2.  
 682 subpellucidus, *Berk. Linn. Journ.* xvi. 51.  
 683 exiguis, *Cooke in Herb.*  
 684 plicatus, *Blume. Ann. Sci. Nat.* 1844, 185.  
 685 Gaudichaudi, *Lev. Ann. Sci. Nat.* 1844, 185.  
 686 rheicolor, *B. & C. Linn. Journ.* x. 303.  
 687 Splitgerberi, *Mont. Syll.* 102.  
 688 gallopavonis, *B. & Br. Linn. Trans.* i.  
 689 nebularis, *Cooke in Herb.*  
 690 hinnuleus, *B. & Cke. Linn. Journ.* xv. 378.

### *Dubia.*

- 691 pæcillus, *Berk. Ann. Nat. Hist.* x. 372.  
 692 petalodes, *Berk. Hook. Journ.* 1856, 198.

**E. Funales, Fr.** Dimidiato, sessiles, strato intermedio hymenophoro coriaceo, superiori e fibris rudibus solutis umbricatis compacto.

- 693 mons-veneris, *Jung. Fl. Java.* 61.  
 694 leoninus, *Klot. Linn.* viii. 486.  
 695 leonotis, *Kalch. Grev.* iv. 73.  
 696 ursinus, *Fr. Sys. Myc.* i. 361.  
 697 funalis, *Fr. Epic.* 459.  
 698 stuppeus, *Berk. Ann. Nat. Hist.* vii. 1841, 453.  
 699 ozonoides, *Berk. Hook. Journ.* 1852, 166.  
 700 Fergussoni, *Berk. in Herb.* 3016.

- 701 Lindheimeri, *B. & C. Grev.* i. 66.  
 702 aculeifera, *B. & C. Cuba Fungi*, No. 305.  
 703 trichomallus, *B. & M. Mont. Syll.* 165.  
 704 holophæus, *Mont. Syll.* 163.  
 705 endothrix, *Berk. Hook. Journ.* 1857, 197.  
 706 cladotrichus, *B. & C. Cuba Fungi*, No. 225.  
 707 Perrotettii, *Lev. Ann. Sci. Nat.* 1844, 195.

**F. Stuposi.** Pileo e flocculose glabrato, adpresseve villoso, inaequabili azono, contextu fibroso-lignoso aut stuppeo.

Pileo semper sicco, et a coriaceis zonis nullis discoloribus saltem manifestis diversi.

\* *Contextu albo.*

- 708 cervinus (*Schw.*), *Fr. Epic.* 474.  
 709 ravidus, *Fr. Hym. Eur.* 566.  
 710 villosum, *Fr. Epic.* 474.  
 711 albidus, *Trog. in Flora Schw.* 435.  
 712 fibula, *Fr. Hym. Eur.* 567.  
 713 expansus, *Fr. Epic.* 475.  
 714 biformis (*Klot.*) *Fr. Epic.* 475.  
     = *Carolinensis*, *B. & C.*, *Hook. Journ.* 1849.  
     var. *balsamiferæ*, *Klot. Linn.* 1833.  
 715 fimbriatus, *Fr. Epic.* 476.  
 716 serialis, *Fr. Sys. Myc.* i. 370.  
 717 molliusculus, *Berk. Hook. Journ.* 1847, 320.  
 718 gossypinus, *Lev. Ann. Sci. Nat.* 1843, 124.  
 719 apalus, *Lev. Ann. Sci. Nat.* 1843, 124.  
 720 hololeucus, *Kalch. Hedw.* xv. 114.  
 721 venulosus, *Jung. Fl. Java* 57.  
 722 hirtellus, *Fr. Nova Symb.* 66.  
 723 subflavus, *Lev. Ann. Sci. Nat.* 1846, 300.  
 724 nigrozonatus, *Sauter Hedw.* xv. 33.  
 725 proteiformis, *Cooke MSS.*  
     = *proteus*, *Kalch. Grev.* x. 102. (*nec. Berk.*)  
 726 Sullivanti, *Mont. Syll.* 163.  
 727 pergamenus, *Fr. Epicr.* 480.  
     = *pseudopergamenus*, *Thum., Myc. Univ.*  
     = *Menandianus*, *Mont. Syll.* 165.

\*\* *Contextu pallido.*

- 728 seriatus, *Kalch. Grev.* x. 102.  
 729 actinobolus, *Mont. Syll.* 166.  
 730 sciurinus, *Kalch. Pilz. Fl. Sib.* 897.  
 731 scariosus, *B. & C. Grev.* i. 52.  
 732 cristatus, *Cooke Grev.* x. 132.  
 733 undigerus, *B. & C. Linn. Journ.* x. 317.

- 734 acutus, *Cooke Grev.* x. 132.  
 735 extensus, *Berk. in Herb. Hook.*  
 736 versatilis, *Berk. Hook. Journ.* i. 450.
- \* \* *Contextu carneo v. lilacino.*
- 737 pruinatus (*Klot.*), *Fr. Epic.* 478.  
 738 Feei, *Fr. Epic.* 476.  
 739 lilacino-gilvus, *Berk. Ann. Sci. Nat.* iii. 324.  
 740 Eucalypti, *Kalch. Grev.* iv. 73.  
 741 phæporus, *Mont. Syll.* 165.
- \*\* *Contextu rubro v. purpureo.*
- 742 cinnabarinus, *Fr. Syst. Myc.* i. 371.  
 743 purpurascens (*Hook.*), *Fr. Epic.* 473.
- \*\*\* *Contextu flavo v. aureo.*
- 744 sordidulus, *Berk. in Cke. Enum.* 153.  
     = *sordidus* (B.), *Fr. Nova Symb.* 64.  
 745 sulfuratus, *Fr. Nova Symb.* 63.  
 746 aurantiacus, *Peck. 26 Rep.* 69.  
 747 radiatus, *Fr. Hym. Eur.* 565.  
     = *glomeratus*, *Peck. 24. Report* 78.  
 748 nodulosus, *Fr. Hym. Eur.* 566.  
 749 extenuatus, *Mont. Syll.* 166.  
 750 helvolus, *Fr. Elen.* 490.  
 751 chrysites, *Berk. Hook. Journ.* 1856, 233.
- \*\*\* *Contextu fusco-ferrugineo.*
- 752 triqueter (*Seer.*), *Fr. Hym. Eur.* 565.  
 753 leporinus, *Fr. Hym. Eur.* 565.  
 754 vulpinus, *Fr. Hym. Eur.* 565.  
 755 concrescens, *Mont. Syll.* 166.  
 756 campyloporus, *Mont. Syll.* 163.  
 757 inconstans, *Kalch. Grev.* x. 55.  
 758 proteus, *Fr. Fungi Nat.* 12.  
     = *Berk. Hook. Journ.* 1843, 414.  
 759 Ecklonii, *Berk. in Herb.*  
 760 floccosus, *Jungh. Fl. Java* 49.  
 761 venustus, *Berk. Hook. Journ.* 1845, 55.  
 762 floridanus, *Berk. Ann. Nat. Hist.* x. 376.  
 763 oniscus, *Fr. Nova Symb.* 66.  
 764 Lindbladii, *Berk. Grev.* i. 54.  
 765 indecorus, *Jungh. Fl. Java* 51.  
 766 nuceus, *Fr. Nova Symb.* 64.  
 767 corrugis, *Fr. Nova Symb.* 66.  
 768 chrysoleucus, *Kalch. Grev.* iv. 72. (= 838.)  
 769 candicans, *Lev. Ann. Sci. Nat.* 1863, 295.

**G. Coriacei.** Pileo dimidiato, sessili, coriaceo, zonato, contextu tenaci floccoso.

**A. Versicolores. Contextu albo.**

\* *Genuini.*

- 770 versicolor, *Fr. Hym. Eur.* 568.
- 771 fuscatus, *Fr. Hym. Eur.* 569.
- 772 armenicolor, *B. & C. Linn. Journ.* x. 315.
- 773 pictilis, *Berk. Hook. Journ.* 1852, 162.
- 774 rufopictus, *B. & C. in Herb. Berk.*
- 775 arenicolor *B. & C. Linn. Journ.* x. 315.
- 776 plumbeus, *Lev. Ann. Sci. Nat.* 1846, 136.
- 777 cinerellus, *Cooke Enum. Polyp.* 135.  
= *cinereus*. *Lev. Ann. Sci. Nat.* 1846, 140.
- 778 detonus, *Fries Epic.* 478.
- 779 surinamensis, *Mig. Bull. Neerl. Ind.* 1839, 454.
- 780 illotus, *Kalch. Grev.* x. 102.
- 781 pavonius (*Hook.*) *Fr. Epic.* 477.
- 782 obstinatus, *Cooke Grev.* xii. 17.

\*\* *Hirsuti.*

- 783 hirsutus, *Fr. Hym. Eur.* 567.
- 784 galbanatus, *Berk. Ann. Nat. Hist.* 1842, 377.
- 785 velutinus, *Fr. Hym. Eur.* 568.  
= *nigricans*, Lasch.  
= *rugulosus*, Lasch.
- 786 hirsutulus, *Schw. Amer. Bor.* 373.
- 787 pocas, *Berk. Linn. Journ.* xvi. 51.
- 788 nigro-marginatus, *Schw. Syn. Car.* 912.
- 789 balsameus, *Peck. 30th Report.*
- 790 gausapatus, *Kalch. Grev.* x. 102.
- 791 zonatus, *Fr. Hym. Eur.* 568.
- 792 hædinus, *Berk. Hook. Journ.* 1856, 234.
- 793 glirinus, *Kalch. Grev.* iv. 72.  
= *murinus*, Kalch.
- 794 cineraceus, *Lev. Ann. Sci. Nat.* 1846, 139.
- 795 cæsio-glaucus, *Cooke Grev.* x. 121.
- 796 galberulosus, *Lev. Ann. Sci. Nat.* 1846, 129.
- 797 limbatus, *Fr. Epic.* 479.
- 798 pectunculus, *Lev. Ann. Sci. Nat.* 1846, 138.
- 799 vellereus, *Berk. Hook. Journ.* i. 455.
- 800 Meyeni, *Klotsch. Nova Acta. N.C.* xix. 236.
- 801 pinsitus, *Fr. Epicr.* 479.
- 802 decipiens, *Schw. Amer. Bor.* 385.
- 803 hypothejus, *Kalch. Grev.* x. 102.
- 804 brunneoalbus, *Fr. Nova Symb.* 78.  
= *brunneoleucus*, Berk. *Hook. Journ.* v. 4.

\*\* *Ectypi*. Pileo glabrescente.

- 805 ectypus, *B. & C. Grev.* i. 52.
- 806 trizonatus, *Cke. Grev.* xii. 17.
- 807 Kicksianus, *Lev. Ann. Sci. Nat.* 1848, 122.
- 808 chartaceus, *B. & C. Grev.* i. 53.
- 809 gratus, *Berk. Hook. Journ.* 1852, 163.
- 810 Wynnei (*B. & Br.*), *Fr. Hym. Eur.* 569.
- 811 sobrius, *B. & C. Linn. Journ.* x. 316.

\*\* *Abietini*.

- 812 arcticus, *Fr. Epic.* 479.
- 813 abietinus, *Fr. Hym. Eur.* 569.
- 814 abnormis, *Lev. Ann. Sci. Nat.* 1844, 186.
- 815 parvulus, *Schw. Amer. Bor.* 386.
- 816 Lundii, *Fr. Epicr.* 479.
- 817 umbonatus, *Fr. Nova Symb.* 71.
- 818 barbatulus, *Fr. Nova Symb.* 71.
- 819 cilicioides, *Fr. Nova Symb.* 71.
- 820 Sartwelli, *B. & C. Grev.* i. 51.
- 821 Hasseltii, *Lev. Ann. Sci. Nat.* 1844, 187.
- 822 dissectus, *Lev. Ann. Sci. Nat.* 1846, 139.
- 823 convolutus, *Lev. Ann. Sci. Nat.* 1844, 186.
- 824 confertus, *Lev. Ann. Sci. Nat.* 1844, 187.
- 825 tristis, *Pers. Myc. Eur.* ii. 94.
- 826 stereoides, *Fr. Hym. Eur.* 569.
- 827 cyphelloides, *Fr. Nova Symb.* 72.

**B. Scortei.**

\* *Contextu pallido*.

- 828 cascus, *Fr. Nova Symb.* 72.
- 829 scorteus, *Fr. Nova Symb.* 73.
- 830 cingulatus, *Fr. Epic.* 476.
- 831 nigrocinctus, *Berk. Ann. N. Hist.* x. 377.
- 832 vittatus, *Berk. Hook. Journ.* 1847, 505.
- 833 myrrhinus, *Kickx. Bull. Acad. Sci. Brux.* v. 370.
- 834 psilodermus, *Berk. & Mont. Syll.* 167.
- 835 leiodermus, *Mont. Syll.* 168.
- 836 splendens, *Lev. Ann. Sci. Nat.* 1844.
- 837 personatus, *Berk. & Br. Linn. Journ.* xiv. 51.
- 838 peradeniae, *B. & Br. Linn. Journ.* xiv. 51.
- 839 coriaceus, *Lev. Ann. Sci. Nat.* 1846, 137.
- 840 unguiformis, *Lev. Ann. Sci. Nat.* 1846, 138.
- 841 inquinatus, *Lev. Ann. Sci. Nat.* 1846, 140.
- 842 lenis, *Lev. Ann. Sci. Nat.* 1848, 122.
- 843 aleuritidis, *Reich. Krypt. Hawai.* 8.
- 844 planus, *Peck. 31 Report N. Y. Mus.* 37.
- 845 vernicifluus, *Berk. Fl. Tasm.* ii. 254.

- 846 dubius, *Berk. Ann. Nat. Hist.* 1843, 374.  
 847 zeylanicus, *Berk. Ann. Nat. Hist.* 1843, 377.  
 848 holotephrus, *B. & C. Linn. Journ.* x. 315.  
 849 rigidus, *Lev. Ann. Sci. Nat.* 1844, 189.  
 850 Persoonii, *Fr. (Dædalea sanguinea, Klot.).*  
 851 Moseleii, *Berk. Linn. Journ.* xvi. 40.

\*\* *Contextu carneo.*

- 852 cupreus, *Berk. Ann. Nat. Hist.* 1839, 393.  
 853 cupreo-roseus, *Berk. Lond. Journ.* 1856, 233.  
 854 cupreo-vinosus, *Berk. in Herb. Berk.*

**C. Lutescentes.**

\* *Contextu fulvo-ferrugineo.*

- 855 lutescens, *Pers. Myc. Eur.* ii. 71.  
 856 torridus, *Fr. Epicr.* 490.  
 857 cyclodes, *Fr. Nova Symb.* 74.  
 858 lanatus, *Fr. Epicr.* 490.  
 859 occidentalis (*Klotsch.*), *Fr. Epic.* 491.  
     = *malachodermus*, *Fr. in Herb. Berk.*  
     = *substrigosus*, *Berk. in Herb.*  
 860 rigidus, *Berk. Ann. Sci. Nat.* 1849, 240.  
 861 crocatus, *Fr. Epicr.* 477.  
 862 byrsinus, *Mont. Cub.* 391. (= 859.)  
 863 tephroleucus, *Berk. Hook. Journ.* 1852, 185.  
 864 neaniscus, *Berk. in Herb.*  
 865 comatus, *Fr. Nova. Symb.* 75.  
 866 Gerardi, *Berk., in Herb.* No. 2780.  
 867 corrugatus, *Lev. Ann. Sci. Nat.* 1846, 136.  
 868 sericellus, *Lev. Ann. Sci. Nat.* 1846, 125.  
 869 connexus, *Lev. Ann. Sci. Nat.* 1846, 135.  
 870 aculeatus, *Lev. Ann. Sci. Nat.* 1846, 137.  
 871 melaenus, *Lev. Ann. Sci. Nat.* 1846, 131.  
 872 Bonplandianus, *Lev. Ann. Sci. Nat.* 1846, 301.  
 873 cohærens, *Lev. Ann. Sci. Nat.* 1846, 132.  
 874 limitatus, *B. & C. Grev.* i. 63.  
 875 callimorphus, *Lev. Ann. Sci. Nat.* 1846, 132.  
 876 Swartzianus, *Lev. Ann. Sci. Nat.* 1846, 132.  
 877 guadelupensis, *Lev. Ann. Sci. Nat.* 1846, 134.  
 878 polyzonus (*Pers.*), *Fr. Epic.* 477.  
 879 tricolor, *Lev. Ann. Sci. Nat.* 1846, 134.  
 880 platypilus, *Lev. Ann. Sci. Nat.* 1844, 192.

\*\* *Contextu flavo vel aureo.*

- 881 citreus, *Berk. Linn. Journ.* xiii. 162.  
 882 flavidus, *Berk. Hook. Journ.* 1852, 161.  
 883 xeranticus, *Berk. Hook. Journ.* 1852, 161.

\* \* *Contextu olivaceo.*884 aratus, *Berk. Linn. Journ.* xvi. 53.= *Trametes acupunctatus*, *Berk. Linn. Journ.* xiii, 164.885 luteo-olivaceus, *B. & Br. Linn. Trans.* i. 402.886 purpureo-fuscus, *Cke. in Herb.*\*\* *dubiae.*887 rufus, *Lev. Ann. Sci. Nat.* 1846, 133.= *subfulvus*, *Cke. Enum. Poly.* 153.888 spurcus, *Lev. Ann. Sci. Nat.* 1846, 135.D. *Caperati.*\* *Contextu fusco.*889 Hasskarlii, *Lev. Ann. Sci. Nat.* 1844, 190.890 tabacinus, *Mont. Syll.* 167.891 iodinus, *Mont. Syll.* 167.892 eichoraceus, *Berk. Fr. Nova Symb.* 76.= *intybaceus*, *B. Hook. Journ.* i. 149.893 setiporus, *Berk. Hook. Journ.* 1847, 505.894 licnoides, *Mont. Syll.* 166.895 spadiceus, *Jungh. Fl. Java* 54.= *Javanicus*, *Cooke. Enum. Poly.*896 badius, *Berk. Ann. Sci. Nat.* 1846.897 xerampelinus, *Kalch. Grev.* iv. 72.898 aculeans, *Berk. Hook. Journ.* 1856, 199.899 xerophyllaceus, *Berk. Hook. Journ.* 1856, 199.900 scytinus, *Berk. Ann. Nat. Hist.* x. 1842.901 caperatus, *Berk. Ann. Nat. Hist.* 1839, 391.902 cirrhiferus, *B. & C. Linn. Journ.* x. 314.903 sulcifer, *B. & Cke. Linn. Journ.* xv. 383.904 vibratilis, *B. & C. Linn. Journ.* x. 314.905 fulvitinctus, *B. & C. Linn. Journ.* x. 313.906 lineatus (*Pers.*), *Fr. Epic.* 477.907 phocinus, *B. & Br. Linn. Journ.* xiv. 52.908 phœus, *Lev. Ann. Sci. Nat.* 1846, 132.909 fuscus, *Lev. Ann. Sci. Nat.* 1846, 137.\*\* *Contextu purpureo-fusco.*910 æthiops, *Cooke Grev.* ix. 99.

**H. Membranacei.** Pileo papyraceo, tenuissimo, contextu toto longitudinaliter fibroso, nullo floccoso ; poris brevissimis.

911 thelephoroides (*Hook.*), *Fr. Epic.* 473.912 azureus *Fr. Nova Symb.* 77.913 cinerascens (*Schw.*), *Fr. Epic.* 481.914 sector (*Ehr.*), *Fr. Epic.* 480.

- 915 bivalvis (*Pers.*), *Fr. Epic.* 480.  
 916 striatus, *Fr. Epic.* 480.  
 917 Fernandesianus, *Mout. Syll.* 168.  
 918 Drummondi (*Klot.*), *Fr. Epic.* 481.  
 919 plumbosus, *Fr. Nova Symb.* 77.  
 920 papyraceus, *Fr. Epic.* 481.  
 921 breviporus, *Cooke Grev.* xii. 17.  
 922 membranaceus, *Fr. Epic.* 481.  
 923 submembranaceus, *Sauter. Hedw.* xv. 153.  
 924 tenuis, *Link. in Berl. Mag.*  
 925 tener, *Lev. Ann. Sci. Nat.* 1846, 139.  
 926 cervino-gilvus, *Jungh. Fl. Java* 45.  
 927 vespilloneus, *Berk. Hook. Journ.* 1856, 199.  
 928 tenuissimus, *Lev. Ann. Sci. Nat.* 1844, 188.  
 929 Braunii, *Rabh. Fungi Eur.* 2005.

I. **Subresupinati.** Pileo subresupinato vel margine reflexo.

- 930 catervatus, *Berk. Fl. New Zeal.* ii. 180.  
 931 beharensis, *Berk. Hook. Journ.* 1852, 163.  
 932 niveus, *Jungh. Fl. Java*, 48.  
 933 bireflexus, *B. & Br. Grev.* x. 101.  
 934 eriophorus, *B. & Br. Linn. Trans.* ii. 60.  
 935 evolvens, *Berk. Hook. Journ.* 1856, 253.  
 936 hymeninus, *Lev. Ann. Sci. Nat.* 1863, 295.  
 937 biferus, *Berk. & Glaz. Vid. Med. Kjob.* 1879, 31.  
 938 deglubens, *B. & C. in Curt. Cat.*  
 939 aggrediens, *Berk. in Vid. Med. Kjob.* 1879, 31.  
 940 undatus, *Pers. Myc. Eur.* t. 16, f. 3.  
 941 Broomei, *Rabh. F. Eur.* 2004.  
 942 Ravenelii, *Berk. & Fr. in Nova Symb.* 66.  
 943 polymorphus, *Rostk. Poly.* iv. t. 56.  
 944 latus, *Berk. Ann. Nat. Hist.* iii. 325.  
 945 placentæformis, *B. & C. in Herb. Berk.*

MICROTHAMNION VEXATOR, *Cooke.*

We regret to suppose that we have overlooked some previous description of this species. In "The Naturalist" for February, 1886, we note in a communication by W. B. Turner this species is cited as "Microthamnion vexator (*Turner*), *Cooke*," implying some previous description by Mr. Turner, of which we confess to be ignorant. Wishing to give all honour to whomsoever honour is due, we will correct this, provided Mr. Turner will oblige us with reference to the description which has precedence of ours under the above name. Otherwise, in the absence of such previous description, such an implication is scarcely justifiable.

## HEPATICÆ OF AMAZON AND ANDES.\*

No one possessing an interest in the Botany of the British Islands can look upon the volume now before us without a sigh of regret that the Hepaticæ of Great Britain are in a lamentable plight for lack of a monograph. It can hardly seem true that this part of our Flora has not been brought up to date for half a century, except a mere outline published at fourpence twenty years ago. It is true that a work was commenced by a very capable author a few years since, and collapsed at the fourth part; but wherefore it was never resumed, with all the plates ready, is a mystery never explained. Ill health and the encroachments of age are, we fear, strongly against the author of the present work being induced to supply the deficiency, which otherwise would be very safe in his hands.

It is many years since Mr. Richard Spruce made his remarkable collections of cryptogamic plants in South America, and through the latter portion of that time this work has been maturing itself in his mind, and we congratulate him on sufficient health and strength having been left to him to bring it thus far towards completion, for we are informed in a prefatory note that "the additional matter on the physical features of the regions explored, and their connection with the vegetation—especially the hepatic vegetation—with critical remarks on certain of the genera and species, the author proposes (if he is able to complete it) to issue in the shape of a supplement to the work."

We have no intention of entering upon any detailed critical examination of the work before us; indeed, such details would hardly commend themselves to the general reader, and, on the whole, we may assert, without contradiction, that not only is Mr. Spruce entirely at home with the Hepaticæ, but he has worked out his monograph carefully, and with a masterly hand. This volume will undoubtedly prove itself a worthy monument of his labours. It may be that he has toiled through a long life in the pursuit of his favourite branches of Natural History, without much pecuniary remuneration or any great increment of worldly goods, yet he has the satisfaction of knowing that he has worked honestly and well. This volume, moderate in price, clear and neat in arrangement, typographical reproduction, and illustration, is recommended not only to all Natural History Societies, but to all individual naturalists who desire to have on their bookshelves the best works in all branches of systematic botany. And we venture to think that this will be one of the favoured few which will augment in value with the lapse of time.

\* "Hepaticæ of the Amazon and of the Andes of Peru and Ecuador," by Richard Spruce, 588 pp., 22 plates, 8vo. Trübner and Co.

## SOME EXOTIC FUNGI.

By M. C. COOKE.

## INDIA.

**Agaricus (Armillaria) rhizopus**, Cooke.

Albidus. Pileo carnosu, e convexo expanso, obtuso, glabro, demum tessulato-sulcato, stipite farcto, subfistuloso, ventricoso, deorsum attenuato, radicato, demum strigoso, annulo ampio, infero, patente; lamellis leviter adnatis, subdistantibus, albidis.

On clay soil, left by falling of rivers, and mostly attached to roots of grass, sedges, &c. Delimitation Commission, Afghanistan, 1884-5. (J. E. T. Aitcheson, No 167.)

Pileus 1-2 in., stem 2-3 in. long,  $\frac{1}{4}$  in. thick.

**Agaricus (Collybia).**

Beyond campanulate pileus, and stem much thickened downwards, nothing can be determined without further information. (Aitcheson, No. 172.)

**Cronartium capparidis**, Hobson.

Hypophyllum. Filamentis curvulis, intricatis, fuscis. Sporis ellipticis, utrinque subattenuatis fuseis ( $0.026\text{-}0.028 \times 0.014\text{-}0.017$  mm.).

On leaves of *Capparis*. Belgaum, Bombay. (Maj.-Gen. Hobson.)

## AUSTRALASIA.

**Phyllosticta palmicola**, Che.

Maculis irregularibus, amphigenis, albido-cinereis, margine sub-elevato fusco; peritheciis subinnatis, atris, minutis, pertusis, plurimque numerosissimis. Sporulis elliptico-cylindraceis, hyalinis ( $0.5 \times 0.2$  mm.).

On palm leaves. Daintree, Australia.

**Septoria Colensoi**, Cooke.

Maculis suborbicularibus, albidis, margine elevato, purpureo-lineato. Peritheciis paucis, semi-immersis, punctiformibus, atris. Sporulis rectis flexuosisve, linearibus, multinucleatis, hyalinis ( $0.05 \times 0.01$  mm.).

On thick leaves of unknown plant (suffruticose?). New Zealand. (Colenso, 6579.)

**Uredo Celmisiae**, Cooke.

Epiphylla. Maculis obliteratis. Soris ellipticis, pallidis, epidermide diu clausâ, demum disrupente. Sporulis ovalibus, subpellucidis, verruculosis ( $0.03\text{-}0.035 \times 0.02\text{-}0.022$  mm.).

On leaves of *Celmisia coriacea*. Arthur's Pass, New Zealand. (Kirk, 252.)

Colour of the sporules, when fresh, not indicated.

**Aecidium Discariae**, Cke.

Hypophyllum. Maculis orbicularibus, fuscis. Peridiis cupulæ-formibus, semi-immersis, congestis; margine fimbriato albo. Sporulis ovalibus, flavidis.

On *Discaria* leaves. Wellington, New Zealand. (Kirk, 215.)

**Sphaerella rubiginosa, Cke.**

Epiphylla. Peritheciis sparsis, minutis, punctiformibus, sub-prominulis, atris. Ascis clavatis, sessilibus. Sporidiis ellipticis, obtusis, medio leniter constrictis, uniseptatis, chlorinis ( $\cdot01 \times \cdot005$  mm.).

On dead leaves of *Pittosporum rubiginosum*. Johnston River, Queensland.

Quite different from *Sphaerella pittospori*, Cke., although the fructification is similar.

## NORTH AMERICA.

**Leptothyrium lirioidendri, Cke.**

Peritheciis in macula exarida fusca sparsis, epiphyllis, disciformibus, nitidis, plano-convexis, atris, minutis. Sporulis cylindraceis, curvulis rectisque, tenuibus, hyalinis ( $\cdot005 \times \cdot001$  mm.).

On leaves of *Liriiodendron*. Aiken, S. Car. (Ravenal, 2600.)

Associated with *Hysterium maculare* forma *Lirioidendri*.

**Phoma cerasina, Cooke.**

Epiphylla. Peritheciis punctiformibus, densissime gregariis, semi-immersis, atris, nitidis, poro pertusis. Sporulis subcylindricis, utrinque rotundatis, rectis, enucleatis, hyalinis,  $\cdot015 \times \cdot016 \times \cdot0035$  mm.

On dead leaves of *Prunus lauro-cerasus*. Aiken, S. Car. (Ravenal, 2573 bis.)

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## NEW BRITISH FUNGI.

(Continued from p. 41.)

**Phoma galacis, Cooke.**

Spots irregular, pale brown or cinereous, without any distinct margin. Perithecia gregarious in dense patches, very minute ( $\cdot08$  mm. diam.), immersed at the base, punctiform, black, shining. Sporules cylindrical, rounded at the ends, 2-4 nucleate, hyaline ( $\cdot012 \times \cdot015 \times \cdot004$  mm.).

On fading and dead leaves of *Galax aphylla*. Kew.

**Phyllosticta pentestemonis, Cooke.**

Spots irregular, brown, without distinct margin. Perithecia subimmersed, mostly concentrically disposed, sometimes scattered, punctiform, black. Sporules ovoid-oblong or elliptic, hyaline ( $\cdot005 \times \cdot003$  mm.).

On leaves of *Pentestemon grandiflorus*. Kew.

**Ustilago marina, Durieu. Rabh. F. Eur., 1199.**

Mycelium black, forming tubercles on the rhizomes. Spores of two forms, one globular or obtusely ovoid, or elongated ( $\cdot01 \times \cdot013$  mm.), the other irregularly ovoid, elongated ( $\cdot016 \times \cdot01 \times \cdot013$  mm.), clear olive-brown, with a smooth episporium.—Waldh. *Ustilag.*, No. 27.

On the rhizomes of *Scirpus parvulus*. Little Lea, near Poole, Dorset. (E. M. Holmes.)

## HANDBOOK OF MOSSES.\*

This very handy and useful little Handbook is really a wonderful shilling's worth, and gives an excellent introduction to the study of mosses. Any one who knows what a careful botanist Mr. Bagnall is would naturally expect from him a most trustworthy guide in his favourite pursuit. Amongst Bryologists, certainly, there will be very few who do not know our author by name or correspondence, and those who know him personally will feel pleased that he has overcome his diffidence and reserve so far as to publish this little "Handbook" for beginners. An enumeration of the successive chapters will give a fair synopsis of the work : Appliances and Material Required for the Study ; Development ; Moss Habitats ; Classification ; The Geographical Distribution of Mosses ; Cultivation ; Uses ; Preparing Specimens for the Cabinet and Herbarium.

When we add that there are 39 woodcut illustrations, that the paper and printing is good, and the matter excellent, no one can hesitate to order copies, and present them to youths of both sexes, so as to induce a few, even if only a few, of the rising generation to acquire a taste for, and a desire to pursue still further, the study of mosses.

### A NEW BRITISH LICHEN.

BY THE REV. W. JOHNSON.

In recently examining a gathering of lichens made in Weardale, Durham, some time ago, I had the pleasure of turning up the following new species, which, as such, seems distinct and definite in its individual characteristics :—

#### **Lecanora Weardalensis, Johns.**

Thallus determinate, thin, smooth, rimulose, virescenti-cinerascent ; apothecia immersed in thallus, then emergent, fuscous, with prominent depressed proper margin; thalline margin more or less circumscribed ; hymenium fuscous ; paraphyses slender, spores eight, rather large, oblongo-ellipsoid, simple, colourless ; gelatina hymenia blue with iodine, then vinoso-fulvescent. Thallus K—C—.

On sandstone in subalpine places. Rare. Lanehead, Weardale, Durham, 1879.

\* "Handbook of Mosses," by James E. Bagnall, A.L.S. Cloth, with cuts ; 96 pp. Swan Sonnenschein and Co.

## ILLUSTRATIONS OF BRITISH FUNGI.

The third and fourth volumes of this work are now completed with the 39th part, reaching 622 coloured plates of species belonging to the genus *Agaricus*. This will undoubtedly be the most complete illustrated work on the gill-bearing Hymenomycetes ever attempted, and with the fortieth part another two volumes, which it is hoped may conclude the present series, will be commenced. The genera still remaining to be illustrated are *Coprinus*, *Bolbitius*, *Corticarius*, *Gomphidius*, *Paxillus*, *Hygrophorus*, *Lactarius*, *Russula*, *Cantharellus*, *Nyctalis*, *Marasmius*, *Lentinus*, *Panus*, *Xerotus*, *Troglia*, *Schizophyllum*, and *Lenzites*. There must be some hesitation in affirming that such a number of genera can be compressed into two volumes, since calculation in advance is scarcely possible, but should it extend to three volumes, subscribers will surely prefer that alternative to bringing the work to a premature and imperfect conclusion. The *Polyporei* and *Hydnæi* and other orders of the *Hymenomycetes*, might form the subjects of a second series, but on that point nothing can be determined until the present series is complete, which will probably occupy three years. The publication of the descriptions of species figured in the 3rd and 4th volumes is resumed at the end of the current number of this journal, and will be continued without intermission.

**IRISH FUNGI.**—We have received a “preliminary report on the Fungi of Glengariff and Killarney,” by Greenwood Pim, M.A., F.L.S., and although very scanty, a good commencement, which we hope may lead to a more complete list. The Sphaeropsideæ are represented by a single species, and the Hyphomycetes by two, hence it is very clear that a great deal still remains to be done.

**BRITISH DESMIDS.**—A circular has been issued with a proposal to commence a companion volume to Cooke’s “Fresh Water Algae,” containing coloured figures and descriptions of the Desmids of Great Britain, as soon as sufficient subscribers can be obtained to warrant the venture. It is calculated to occupy about ten parts, each with eight plates, at five shillings per part, and may be concluded in about a year. The names of subscribers are being sent in very slowly, and unless the limit of 200 subscribers is obtained, the project will be abandoned. Numerous letters from all parts having been received urging the publication of such a work, the editor has resolved upon putting the question to a practical test whether the issue of such a volume would ensure sufficient support to secure him from pecuniary loss. All who are willing to assist should send their names immediately to the Editor, 146, Junction Road, London, N.

## SYNOPSIS PYRENOMYCETUM.

(Continued from p. 56.)

2195. **Eutypa viburni**, Berk. in Herb. No. 8827. Sphæria viburni, Schwein. Syn. Car. No. 58.

Composita, bullosa, sub-epidermide lutescente assurgens, solis perforantibus epidermidem ostiolis nigris, stromate candido. Asci clavatis. Sporidiis allantoideis.

On branches of *Viburnum prunifolium*.

Pustules half an inch broad.

2181. **Eutypa millaria**, var. **leptoplaca**, Cke. Sphæria leptoplaca, D. R. & Mont. in Herb. Berk. 8796.

Stromate effuso, pallide cinereo, peritheciis minoribus confertioribus, ostiolis densioribus, ut in typis semi-magnitudinis. Sporidiis .005-.006 mm., vix excedentibus.

On the disc of branches.

2196. **Eutypa lavateræ**, Duby. in Herb. Kewensis.

Late effusa, nigra, ligno immersa, peritheciis globosis, sparsis, ostiolis exsertis conicis, plerumque spiniformibus. Ascis clavatis. Sporidiis allantoideis, hyalinis, utrinque nucleolatis (.0046 mm. long).

On stems of *Lavatera arborea*, near Cannes.

Fam. 7. EUTYPÆ. Stroma late et indefinite effusum, ex matrice plus v. minus mutata. Perithecia stromati immersa, plerumque dense et late gregaria.

GEN 1. **CRYPTOVALSA**, Ces. Stroma effusum, eutypeum. Ascii polyspori. Sporidia allantoidea, hyalina.

2136. <i>protracta</i> , Pers. ...	690	2144. <i>Rabenhorstii</i> , N....	698
2137. <i>ampelina</i> , N. ...	691	2145. <i>arundinacea</i> , S. ...	699
2138. <i>Nitschkei</i> , Fckl. ...	692	2146. <i>depressa</i> , Fr. ...	700
2139. <i>pruni</i> , Fckl. ...	693	2147. <i>citri</i> , Catt. ...	701
2140. <i>effusa</i> , Fckl. ...	694	2148. <i>elevata</i> , B. ...	702
2141. <i>uberrima</i> , Tul. ...	695	2149. <i>rubi</i> , Pass. ...	5906
2142. <i>platensis</i> , Speg. ...	696	2150. <i>eutypæformis</i> , Sacc.	5907
2143. <i>extorris</i> , Sacc. ...	697		

GEN. 2. **EUTYPA**, Tul. Stroma late effusum, corticale v. lignatum; ostiola parva. Ascii octospori. Sporidia allantoidea hyalina.

a. *Ostiola radiatim sulcata*.

2151. <i>Acharii</i> , Tul. ...	618	2155. <i>crustata</i> , Fr. ...	622
2152. <i>tuyutensis</i> , Speg....	619	2156. <i>subtecta</i> , Fr. ...	623
2153. <i>aspera</i> , Nke. ...	620	2157. <i>subcutanea</i> , Wahl.	624
2154. <i>cyclospora</i> , Nke. ...	621	2158. <i>polycocca</i> , Fr. ...	625

2159.	polymorpha,	<i>Nke.</i>	626	2166.	<i>ludebunda</i> , <i>Sacc.</i> ....	632
2160.	maura,	<i>Fr.</i>	...	2167.	<i>arundinacea</i> , <i>Sacc.</i>	633
2161.	mcla,	<i>Schw.</i>	...	2168.	<i>alsophila</i> , <i>D.R. &amp; M.</i>	634
2162.	aulacostoma,	<i>Kze.</i>	628	2169.	<i>spinosa</i> , <i>Pers.</i> ...	635
2163.	tetragona,	<i>Duby.</i> ....	629		(= <i>limæformis</i> , <i>Schw.</i> )	
2164.	referciens,	<i>Nke.</i> ...	630	2170.	<i>anomala</i> , <i>Not.</i> ...	636
2165.	leprosa,	<i>Pers.</i> ...	631			

b. *Ostiola non sulcata.*

2171.	lata,	<i>Pers.</i>	...	637	2185.	<i>leucostroma</i> , <i>M.</i> ...	651
2172.	leioplaca,	<i>Fr.</i>	...	638	2186.	<i>rhodi</i> , <i>Nke.</i> ...	652
2173.	luteobasis,	<i>Ellis.</i> ....	639	2187.	<i>ambigua</i> , <i>Kze.</i> ...	653	
2174.	scabrosa,	<i>Bull.</i> ...	640	2188.	<i>velutina</i> , <i>Wallr.</i> ...	654	
2175.	laevata,	<i>Nke.</i> ...	641	2189.	<i>dimorpha</i> , <i>B. &amp; C.</i>	655	
2176.	prorumpens,	<i>Wallr.</i>	642	2190.	<i>comosa</i> , <i>Speg.</i> ...	656	
2177.	flavo-virens,	<i>Tul.</i>	643	2191.	<i>heteracantha</i> , <i>Sacc.</i>	657	
2178.	enteroxantha,	<i>B.</i> ....	644	2192.	<i>atomæspora</i> , <i>C. &amp; E.</i>	5904	
2179.	macrospora,	<i>Nke.</i> ....	645	2193.	<i>bellula</i> , <i>Desm.</i> ...	658	
2180.	mauroides,	<i>Nke.</i> ..	646	2194.	<i>sepulta</i> , <i>B. &amp; C.</i> ...	659	
2181.	nitida,	<i>Nke.</i> ...	647	2195.	<i>sycina</i> , <i>Mont.</i> ...	660	
2182.	fraxini,	<i>Nke.</i> ...	648	2196.	<i>julii</i> , <i>Fab.</i> ...	661	
2183.	millaria,	<i>Fr.</i> ...	649	2197.	<i>viburni</i> ( <i>Schw.</i> ). <i>B.</i>		
	var.	<i>leptoplaca</i> , <i>D. R.</i>				<i>Grev. xiv.</i> 93	
		& <i>M. Grev. xiv.</i> 93		2198.	<i>lavateræ</i> , <i>Duby.</i>		
2184.	aneirina,	<i>Somm.</i> ...	650			<i>Grev. xiv.</i> 93	

c. *Ostiola incerta.*

2199.	microcarpa,	<i>Fr.</i> ...	662	2207.	<i>urticaria</i> , <i>M.</i> ...	671
2200.	penes,	<i>B. &amp; Br.</i> ...	663	2208.	<i>oppansa</i> , <i>Fr.</i> ...	4160
2201.	phaselina,	<i>M.</i> ...	664	2209.	<i>mori-rubræ</i> , <i>Schw.</i>	4166
2202.	micropuncta,	<i>Cke.</i>	665	2210.	<i>elevans</i> , <i>Schw.</i> ...	4169
2203.	micromeria,	<i>M.</i> ...	666	2211.	<i>denigrata</i> , <i>Schw.</i> ....	4170
2204.	rhypodes,	<i>B &amp; C.</i> ....	667	2212.	<i>confusa</i> , <i>Schw.</i> ...	4171
2205.	ulicis (Fr.),	<i>Berk.</i>	668	2213.	<i>allostoma</i> , <i>Schw.</i> ....	4196
2206.	Crouani,	<i>Sacc.</i> ...	670			

GEN. 3. **DIAPORTHE**, *Nke.* *Sacc. Syll.* I., 606. Stroma eutypeum. Sporidia fusoidea vel subellipsoidea uniseptata, plerumque 4-guttata, hyalina, mutica, v. appendiculata.

\* **EUPORTHE**. Peritheciis gregariis ligno superficie tandem denigrato intusque nigra circumscripto immersis.

a. *In Dicotyledoneis arboreis.*

2214.	eres,	<i>Nke.</i> ...	2443	2218.	<i>abdita</i> , <i>S. &amp; S.</i> ...	2447
2215.	Malbranchei,	<i>Sacc.</i>	2444	2219.	<i>orientalis</i> , <i>S. &amp; S.</i>	2448
2216.	sordida,	<i>Nke.</i> ...	2445	2220.	<i>spiculososa</i> , <i>A. &amp; S.</i>	2450
2217.	aucubæ,	<i>Sacc.</i> ...	2446	2221.	<i>sociabilis</i> , <i>Nke.</i> ...	2449
		= <i>insularis</i> , <i>Berk. in Herb.</i>		2222.	<i>tropicalis</i> , <i>Speg.</i> ...	2451

2223. tumulata, *C. & E.* 2452    2247. coronillæ, *Dy.* ... 2475  
 2224. valida, *Nke.* ... 2453    2248. castrensis, *Speg.* ... 2476  
 2225. viticola, *Nke.* ... 2454    2249. brachyceras, *Sacc.* 2477  
 2226. Badhami, *Curr.* ... 2455    2250. biglobosa, *C. & E.* 2478  
 2227. subpyramidata, *B.*  
    & *C.* ... 2456    2251. australis, *S. & S.* 2479  
 2228. spinosula, *K.* ... 2457    2252. americana, *Speg.* ... 2480  
 2229. quilmensis, *Speg.* ... 2458    2253. parabolica, *Fckl.* ... 2481  
 2230. pulla, *Nke.* ... 2459    2254. Fuckelii, *Kze.* ... 2482  
 2231. fallaciosa, *Nke.* ... 2460    2255. sorbariae, *Nke.* ... 2483  
 2232. protracta, *Nke.* ... 2461    2256. simulans, *Sacc.* ... 2484  
 2233. petiolorum, *S. & S.* 2462    2257. japonica, *Sacc.* ... 2485  
 2234. nigricolor, *Nke.* ... 2463    2258. semi immersa, *Nke.* 2486  
 2235. meridionalis, *S.* ... 2464    2259. Cœmansii, *Nke.* ... 2487  
 2236. geographica, *Fckl.* 2465    2260. ceuthosporoides, *B.* 2488  
 2237. meduseæa, *Nke.* ... 2466    2261. samaricola, *Plow.* ... 2489  
 2238. gorgonoidea, *C. & Hk.*  
    *Grev.* iii, 18. ... 2490  
 2239. fasciculata, *Nke.* ... 2467    2263. pinophylla, *P. & Pl.* 2491  
 2240. forabilis, *Nke.* ... 2468    2264. conorum, *Desm.* ... 2492  
 2241. floresiana, *Sp.* ... 2469    2265. occulta, *Fckl.* ... 2493  
 2242. extorris, *S.* ... 2470    2266. concrescens, *Schw.* 4172  
 2243. culta, *S. & S.* ... 2471    2267. leucostroma, *Nke.*  
    *Fckl.* ... 1989  
 2244. cryptica, *Nke.* ... 2472    2268. ilicina, *Cooke F.B.II.* 490  
 2245. crassicollis, *Nke.* ... 2473    2269. keulreuteriae, *Dur.* 2643  
 2246. rhynchophora, *Fab.* 2474

## b. In Dicotyledoneis herbaceis.

2270. Berkeleyi, *Desm.* ... 2494    2290. adunca, *Desm.* ... 2514  
 2271. fæniculacea, *Nsl.* ... 2495    2291. demissa, *Sacc.* ... 2515  
 2272. picea, *P.* ... 2496    2292. discors, *Sacc.* ... 2516  
 2273. nigrella, *Awd.* ... 2497    2293. euphorbiæ, *Cke.* ... 2517  
 2274. tetraspora, *Sacc.* ... 2498    2294. incrustans, *Nke.* ... 2518  
 2275. denigrata, *Wint.* ... 2499    2295. minuscula, *S. & S.* 2519  
 2276. Faberi, *Kze.* ... 2500    2296. muralis, *Sp.* ... 2520  
 2277. inquilina, *Wall.* ... 2501    2297. neapolitana, *Sacc.* 2521  
 2278. eburensis, *Sacc.* ... 2502    2298. obsoleta, *Sacc.* ... 2522  
 2279. grammodes, *Not.* ... 2503    2299. vineæ, *Cke.* ... 2523  
 2280. orthoceros, *Fr.* ... 2504    2300. Desmazierii, *Nsl.* ... 2524  
 2281. trinucleata, *Not.* ... 2505    2301. salviæcola, *C. & E.* 2525  
 2282. pholeodes, *M.* ... 2506    2302. Tulasnei, *Nke.* ... 2526  
 2283. peregrina, *Sacc.* ... 2507    2303. canina, *Sacc.* ... 2527  
 2284. linearis, *Nke.* ... 2508    2304. semi insculpta, *Sacc.* 2528  
 2285. indica, *S. & S.* ... 2509    2305. pratensis, *Sacc.* ... 2529  
 2286. immersa, *Fckl.* ... 2510    2306. Winteri, *Kze.* ... 2530  
 2287. acus, *Blox.* ... 2511    2307. Chailletii, *Nke.* ... 2531  
 2288. arctii, *Lasch.* ... 2512    2308. dulcamaræ, *Nke.* 2532  
 2289. phaceliae, *C. & Hk.* 2513    2309. pampeana, *Speg.* ... 2533

2310. aculeata, <i>Schz.</i> ...	2534	2315. rubiae, <i>Fab.</i> ...	6101
2311. euspina, <i>C. &amp; E.</i> ...	2535	2316. discrepans, <i>Sacc.</i> ...	6098
2312. intermedia, <i>Sacc.</i> ...	3536	2317. apiculosa, <i>Ellis.</i> ...	6099
2313. ambiens, <i>Fck.</i> ...	2537	2318. ceramblicola, <i>B. &amp; Br.</i>	2415
2314. hemicyrpta, <i>D. R. &amp; M.</i> ...	6102	2319. characiæ, <i>Fab.</i> ...	6100

*In Monocotyledoneis et Acotyledoneis.*

2320. gloriosa, <i>S. &amp; S.</i> ...	2538	2323. pantherina, <i>B.</i> ...	2541
2321. asphodea, <i>Sacc.</i> ...	2539	2324. pachystoma, <i>Lev.</i> ...	2542
2322. scandens, <i>S. &amp; S.</i> ...	2540		

\* **TETRASTAGA.** Peritheciis gregariis, cortice immutato vel denique atro-maculato immersis, intus saepius linea nigra limitatis.

*a. Arboricolæ et Fructicolæ.*

2325. rufa, <i>Fr.</i> ...	2543	2356. tenuirostris, <i>Nke.</i> ...	2576
2326. ligulata, <i>Nke.</i> ...	2544	2357. juglandina, <i>Fckl.</i> ...	2577
2327. sartorii, <i>Awd.</i> ...	2545	2358. veneta, <i>S. &amp; S.</i> ...	2578
2328. inæqualis, <i>Curr.</i> ...	2546	2359. phillyreae, <i>Cke.</i> ...	2579
2329 { <i>Doryceniæ, M.</i> ...	2547	2360. resecans, <i>Nke.</i> ...	2580
<i>Dorycnea, Fab.</i> ...	2548	2361. occultata, <i>Fr.</i> ...	2581
2330. seposita, <i>Sacc.</i> ...	2549	2362. nodosa, <i>Fckl.</i> ...	2582
2331. sophoræ, <i>Sacc.</i> ...	2550	2363. obscurans, <i>Sacc.</i> ...	2583
2332. occidentalis, <i>S. &amp; S.</i> ...	2551	2364. scobina, <i>Nke.</i> ...	2584
2333. mendax, <i>Sacc.</i> ...	2552	2365. fraxini, <i>Fckl.</i> ...	2258
2334. disseminata, <i>Sacc.</i> ...	2553	2366. controversa, <i>Desm.</i> ...	2585
2335. compressa, <i>Sacc.</i> ...	2554	2367. ciliaris, <i>Curr.</i> ...	2586
2336. Wibbei, <i>Nke.</i> ...	2555	2368. discutiens, <i>B.</i> ...	2587
2337. Aubertii, <i>West.</i> ...	2556	2369. alnea, <i>Fckl.</i> ...	2588
2338. rostellata, <i>Fr.</i> ...	2557	2370. Lebiseyi, <i>Desm.</i> ...	2589
2339. gallophila, <i>Ellis</i> ...	2558	2371. dubia, <i>Nke.</i> ...	2590
2340. vepbris, <i>Lacr.</i> ...	2559	2372. blepharodes, <i>B. &amp; Br.</i> ...	2591
2341. insignis, <i>Fckl.</i> ...	2560	2373. Beckhausii, <i>Nke.</i> ...	2592
2342. Zaviana, <i>Sacc.</i> ...	2561	2374. circumscripta, <i>Otth.</i> ...	2593
2343. incarcerata, <i>B. &amp; Br.</i> ...	2563	2375. cinerascens, <i>Sacc.</i> ...	2594
2344. Murrayi, <i>B. &amp; C.</i> ...	2564	2376. ophites, <i>Sacc.</i> ...	2595
2345. ambigua, <i>Nke.</i> ...	2565	2377. Ryckholtii, <i>West.</i> ...	2596
2346. radula, <i>Nke.</i> ...	2566	2378. rhois, <i>Nke.</i> ...	2597
2347. oligocarpa, <i>Nke.</i> ...	2567	2379. reecta, <i>Fckl.</i> ...	2598
2348. viridarii, <i>Sacc.</i> ...	2568	2380. spissa, <i>S. &amp; S.</i> ...	2599
2349. Rehmii, <i>Nke.</i> ...	2569	2381. velata, <i>P.</i> ...	2600
2350. cerasi, <i>Fckl.</i> ...	2570	2382. Berlesiana, <i>S. &amp; R.</i> ...	
2351. Raveneliana, <i>Thum.</i> ...	2571	<i>Fun. Gall.</i> ...	2687
2352. quercus, <i>Fckl.</i> ...	2572	2383. dolosa, <i>S. &amp; R. Fun.</i> ...	
2353. insularis, <i>Nke.</i> ...	2573	<i>Gall.</i> ...	2689
2354. multipunctata, <i>Fckl.</i> ...	2574	2384. corni, <i>Fckl.</i> ...	2601
2355. revellens, <i>Nke.</i> ...	2575	2385. Delogneana, <i>S. &amp; R.</i> ...	2602

2386. crustosa, <i>S. &amp; R.</i> ...	2603	2401. <i>aesculi</i> , <i>C. &amp; Hk.</i> ...	2618
2387. nobilis, <i>S. &amp; S.</i> ...	2604	2402. <i>coneglanensis</i> , <i>S. &amp; S.</i> ...	2619
2388. mahoniæ, <i>Speg.</i> ...	2605	2403. <i>minuta</i> , <i>Nke.</i> ...	2620
2389. pungens, <i>Nke.</i> ...	2606	2404. <i>carpinicola</i> , <i>Fckl.</i> ...	2621
2390. mitis, <i>Sacc.</i> ...	2607	2405. <i>castaneta</i> , <i>Nke.</i> ...	2622
2391. Landeghemiæ, <i>West</i>	2608	2406. <i>pithya</i> , <i>Sacc.</i> ...	2623
2392. <i>Laschii</i> , <i>Nke.</i> ...	2609	2407. <i>quadrinucleata</i> , <i>Curr.</i> ...	2624
2393. importata, <i>Nke.</i> ...	2610	2408. <i>didymelloides</i> , <i>Sacc. &amp; M.</i> ...	6103
2394. putator, <i>Nke.</i> ...	2611	2409. <i>incompta</i> , <i>Sacc.</i> ...	6104
2395. spina, <i>Fckl.</i> ...	2612	— <i>margaritifera</i> , <i>Duby.</i>	
2396. <i>Humboldtiana</i> , <i>Speg.</i>	2613	2410. <i>densissima</i> , <i>Ellis</i> ...	6105
2397. exasperans, <i>Nke.</i> ...	2614	2411. <i>Conradi</i> , <i>Ellis</i> ...	6106
2398. macrostoma, <i>Nke.</i>	2615	2412. <i>terebinthi</i> , <i>Fab.</i> ...	6107
2399. scabra, <i>Nke.</i> ...	2616		
2400. medusina, <i>Fr.</i> ...	2617		

b. *Herbicolaæ.*

2413. <i>mazzantioides</i> , <i>S.</i> & <i>S.</i> ...	2625	2428. <i>asparagi</i> , <i>Fckl.</i> ...	2640
2414. <i>maculosa</i> , <i>Sacc.</i> ...	2626	2429. <i>exercitalis</i> , <i>Peck.</i> ...	2641
2415. <i>epilobii</i> , <i>Cke.</i> ...	2627	2430. <i>vacillans</i> , <i>Not.</i> ...	2642
2416. <i>striæformis</i> , <i>Fr.</i> ...	2628	2431. <i>lirella</i> , <i>M. &amp; N.</i> ...	2562
2417. <i>racemula</i> , <i>C. &amp; P.</i> ...	2629	2432. <i>Tid.rryana</i> , <i>Sacc. &amp;</i> <i>Penz.</i> ...	6108
2418. <i>oblita</i> , <i>S. &amp; S.</i> ...	2630	2433. <i>mucronulata</i> , <i>Sacc.</i> ...	6109
2419. <i>valerianæ</i> , <i>Fckl.</i> ...	2631	2434. <i>lupini</i> , <i>Hark. Bull.</i> <i>Cal. I.</i> 44	
2420. <i>desmodii</i> , <i>Peck.</i> ...	1632	2435. <i>asclepiadis</i> , <i>Ell. &amp; Ev.</i> <i>Bull. Cal. I.</i> 44	
2421. <i>desmodiana</i> , <i>C. &amp; E.</i> ...	2633	2436. <i>geranii</i> , <i>Cke. &amp; Hark.</i> <i>Grev. xiv.</i> 8	
2422. <i>sarmenticia</i> , <i>Sacc.</i> ...	2634	2437. <i>elephantina</i> , & <i>Cke. Hark.</i> <i>Grev. xiv.</i> 8	
2423. <i>phaseolorum</i> , <i>B. &amp; C.</i> ...	2635	2438. <i>immutabilis</i> , <i>C. &amp; H.</i> <i>Grev. xiv.</i> 9	
2424. <i>baccharidis</i> , <i>C. &amp; E.</i> ...	2636		
2425. <i>austro-americana</i> , <i>Speg.</i> ...	2637		
2426. <i>aggerum</i> , <i>Sacc.</i> ...	2638		
2427. <i>pardalota</i> , <i>M.</i> ...	2639		

## NEW BRITISH FRESH-WATER ALGÆ.

**Merismopedia ? paludosa**, *Bennett in Jour. Roy. Micr. Soc.* 1886, p. 4,  
t. 1, f. 1.

Each family composed of eight cells, closely packed together without intermediate spaces, and with no evident gelatinous envelope. Cells square in outline, with rounded corners, remarkably regular in form, and each divided into four; cell contents blue-green.

**SIZE.** Length of colony,  $50\mu$ ; breadth,  $25\mu$ ; cells,  $12.5\mu$  in length and breadth.

In bog pools. Loughrigg.

[This is just as possibly a species of *Tetrapedia* as of *Merismopedia*, and perhaps more so.]

**Nostoc hyalinum**, Bennett in *Journ. Roy. Micr. Soc.* 1886, p. 4, t. 1.  
f. 2, 3.

Free swimming, very minute. Gelatinous envelope globose or slightly ellipsoidal, 0·21 mm. in diameter, lamellose, perfectly colourless and transparent. Trichome single in each envelope, interwoven. Cells ellipsoidal or nearly globose, green, 5 $\mu$  in diameter (about forty to the length of the envelope). Heterocysts intercalary, very few in number, three to four in each envelope, spherical, green, 6-7 $\mu$  in diameter.

In a bog pool. Loughrigg Fell.

[It is difficult to recognise any substantial specific difference between this and *N. minutissimum*, Kutz.]

**Pediastrum compactum**, Bennett *Journ. Roy. Micr. Soc.* 1886, p. 5,  
t. 1, f. 4, 5.

Cænobium oval and perfectly regular, 0·09-0·16 mm. in length (or probably more), rather more than half as broad as long. Periphery composed of 32 lunate cells (in the smaller specimens) with two somewhat divergent, very slender, tapering, not bidentate horns, quite as long as the cells themselves. Inner cells irregularly polygonal and densely packed, without any lacunæ, in 2-4 rows. Cænobium invested with a distinct gelatinous envelope. Endochrome yellow-green, that of the peripheral cells of a deeper colour, which gives the appearance under a low power, of a deep green border. Length of cells about 6 $\mu$ .

Bog pools. Loughrigg.

**Mesocarpus ? neaumensis**, Bennett *Journ. Micr. Soc.* 1886, p. 15, t. 2  
f. 31, 32.

Sterile cells, 25 $\mu$  long by 20-25 $\mu$  broad. Endochrome in a single axile plate, with one row of large starch corpuscles, and numerous smaller ones. Conjugation lateral, between two adjacent cells. Fertile cells somewhat ventricose, 200 $\mu$  long by 50 $\mu$  broad at the widest part, connected with the adjoining empty cell by an elbow 50 $\mu$  broad, across which the dividing septum reaches only about half way. ZygospERM oval, 90 $\mu$  by 40 $\mu$ , always nearer to the end of the cell where conjugation has taken place; cell wall of zygospERM quite smooth.

In a duck-pond. Neaum Crag, Skelwith Bridge.

**Zygnema Hassallii**, Bennett, l. c.

We have to thank Mr. Bennett for reminding us that *Zygnema anomalam*, Cooke "Fresh Water Algæ," is not the *Zygnema anomalam*, Kutzing, and therefore he substitutes the above name, which we do not accept. Kutzing's species was subsequent to Hassall's, was supposed by Kutzing to be the same as Hassall's species, and when we pointed out that it was not, it was our impression that it was Kutzing's specific name that should be changed (as it originated in an error of Kutzing) and not that of the true original *Z. anomalam*. To this we shall adhere, and recommend that the continental species shall abandon the name in favour of

*Zygnema Kutztingii* or any other, except the false name under which it has surreptitiously flourished.

**Onychonema Nordstedtiana**, *Turner Journ. Roy. Micr. Soc.* 1865, 934  
t. 15, f. 3.

Cells forming filaments of fifty or sixty cells or more, connected, by the curious sub-capitate claspers peculiar to this genus. Without these processes the cells resemble smooth *Cosmaria*, as they do not possess the hooklets (at the ends of the segments) which pertain to *O. uncinatum*, W., and *O. laeve*, Nord. Chlorophyll confluent.

SIZE.  $14\mu$  long  $\times 18\mu$  broad. Gelatinous sheath,  $36\text{-}40\mu$  broad, Isthmus,  $3\text{-}4\mu$ .

Strensall Common, near York.

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## BRITISH SPHÆROPSIDEÆ.

## PROVISIONAL LIST OF SPECIES HITHERTO FOUND IN THE BRITISH ISLANDS.

BY M. C. COOKE.

(Continued from p. 76.)

479. **Septoria viburni**, West. *Sacc. Syll.* 2657.  
On *Viburnum opulus*. Hampstead; Darenth; Glamis.
480. **Septoria stemmatea**, Fr. *Sacc. Syll.* 2660.  
On leaves of *Vaccinium*. Tay; Ross (N.B.).
481. **Septoria unedonis**, Desm. *Sacc. Syll.* 2661.  
On leaves of *Arbutus unedo*. Highgate; Dereham; Shrewsbury; Glasgow; Glamis.
482. **Septoria fraxini**, Fr. *Sacc. Syll.* 2672.  
On ash leaves. Shere; Bungay; Tay; Moray (N.B.).
483. **Septoria ligustri**, Desm. *Sacc. Syll.* 2681.  
On privet leaves. Kew.
484. **Septoria salicicola**, Fr. *Sacc. Syll.* 2711.  
On willow leaves. Audley End.
485. **Septoria populi**, Desm. *Sacc. Syll.* 2712.  
On poplar leaves. Swanscombe; Holloway.
486. **Septoria castanicola**, Desm. *Sacc. Syll.* 2723.  
On chestnut leaves. Minstead; Bungay; Dinmore; Darenth; Ascot; Lyndhurst; Forres.
487. **Septoria quercicola**, *Sacc. Syll.* 2726.  
On oak leaves. Darenth.
488. **Septoria alnicola**, Cooke. *Sacc. Syll.* 2735.  
On alder leaves. Shere.
- B. On Herbaceous Dicotyledons.
489. **Septoria astragali**, Desm. *Sacc. Syll.* 2748.  
On *Astragalus*. Darenth (F. B. I., 141).
490. **Septoria gei**, Rob. *Sacc. Syll.* 2763.  
On *Geum urbanum*. Darenth (F. B. I., 138); Lyndhurst; Shere; Brechin; Glamis; Dee (N.B.).
491. **Septoria tormentillæ**, Desm. *Sacc. Syll.* 2766.  
On *Tomentilla erecta*. Bishop's Wood, Highgate.
492. **Septoria fragariae**, Desm. *Sacc. Syll.* 2767.  
On *Fragaria vesca*, &c. Hampstead.
493. **Septoria epilobii**, West. *Sacc. Syll.* 2781.  
On *Epilobium*. Darenth; Shere; Lyndhurst; Twycross; Brechin; Moray (N.B.).
494. **Septoria Enotheræ**, West. *Sacc. Syll.* 2782.  
On *Enothera biennis*. Highgate; Whitehall (F. B. I., 428).

495. **Septoria geranii**, Rob. *Sacc. Syll.* 2785.  
On *Geranium Robertianum*. Hackney.
496. **Septoria hyperici**, Desm. *Sacc. Syll.* 2791.  
On *Hypericum elodes*. Lyndhurst.  
On *H. montanum*, &c. Dinmore ; Ross ; Appin ; Glamis.
497. **Septoria saponariæ**, D.C. *Sacc. Syll.* 2797.  
On *Silene inflata*. Leatherhead.
498. **Septoria stellariae**, Rob. *Sacc. Syll.* 2806.  
On *Stellaria media*. Forden ; Forres ; Aberdeen.
499. **Septoria cerastii**, Desm. *Sacc. Syll.* 2808.  
On *Cerastium*. Menmuir.
500. **Septoria scleranthi**, Desm. *Sacc. Syll.* 2810.  
On *Scleranthus*. Bungay.
501. **Septoria violæ**, West. *Sacc. Syll.* 2811.  
On *Viola*. King's Cliffe.
502. **Septoria lepidii**, Desm. *Sacc. Syll.* 2817.  
On *Lepidium*. Penzance ; New Pitsligo ; near Glasgow ; Montrose Basin.
503. **Septoria chelidonii**, Desm. *Sacc. Syll.* 2827.  
On *Chelidonium*. Albury ; Irstead ; Kew ; N. Wales.
504. **Septoria anemones**, Desm. *Sacc. Syll.* 2828.  
On *Anemone nemorosa*. Highgate ; Darenth.
505. **Septoria hepaticæ**, Desm. *Sacc. Syll.* 2830.  
On *Hepatica triloba*. Forden.
506. **Septoria ficariae**, Desm. *Sacc. Syll.* 2833.  
On *Ficaria ranunculoides*. Highgate (F. B. I., 131 ; II., 38) ; Moray ; Tay ; Dee ; Clyde (N.B.).
507. **Septoria hellebori**, Thum. *Sacc. Syll.* 2840.  
On *Helleborus niger*. Kew.
508. **Septoria clematidis**, Rob. *Sacc. Syll.* 2841.  
On *Clematis vitalba*. Dartford ; Tay.
509. **Septoria sedi**, West. *Sacc. Syll.* 2858.  
On *Sedum*. Bungay (F. B. I., 133).
510. **Septoria heraclei**, Desm. *Sacc. Syll.* 2864.  
On *Heracleum*. Highgate (F. B. I., 427) ; Forden ; Shere ; Bala ; Glamis ; Tay. Query—If not a good *Phleospora* ?
511. **Septoria podagrariae**, Lasch. *Sacc. Syll.* 2872.  
On *Ægopodium*. Whitehaven ; Ashmanhaugh ; Bungay (F. B. I., 146) ; New Pitsligo ; Tweed ; Tay ; Dee ; Moray ; Clyde (N.B.).
512. **Septoria petroselini**, Lib. *Sacc. Syll.* 2876.  
On parsley leaves. Glamis ; Aberdeen.
513. **Septoria hydrocotyles**, Desm. *Sacc. Syll.* 2881.  
On *Hydrocotyle vulgaris*. Epping (F. B. I., 134 ; II., 418) ; Aboyne ; Rannoch.
514. **Septoria eryngii**, Pass. *Sacc. Syll.* 2883.  
On *Eryngium*. Near Liverpool.

515. **Septoria menyantæ**, Desm. *Sacc. Syll.* 2887.  
On *Menyanthes trifoliata*. Bungay.
516. **Septoria soldanellæ**, Berk. (*Sacc. Syll.* 2888 ?).  
On *Soldanella*. Swansea.
517. **Septoria lysimachiae**, West. *Sacc. Syll.* 2890.  
On *Lysimachia*. Darenth (F. B. I., 142; II., 31); Lyndhurst; Dee; Argyle.
518. **Septoria veronicæ**, Desm. *Sacc. Syll.* 2896.  
On *Veronica*. Shere.
519. **Septoria primulæ**, Buckn. *Grev.* xvi., 40.  
On *Primula*. Near Bristol.
520. **Septoria convolvuli**, Desm. *Sacc. Syll.* 2909.  
On *Convolvulus arvensis*. King's Cliffe; Hermitage; Highgate (F. B. I., 127); Brentford.
521. **Septoria calystegiæ**, West. *Sacc. Syll.* 2910.  
On *Calystegia sepium*. Lyndhurst; Swansea.
522. **Septoria verbenæ**, Rob. *Sacc. Syll.* 2913.  
On *V. officinalis*. Abinger.
523. **Septoria lavandulæ**, Desm. *Sacc. Syll.* 2914.  
On lavender. Swanscombe (F. B. I., 139).
524. **Septoria lamiicola**, Sacc. *Syll.* 2916.  
On *Lamium*. Swanscombe (F. B. I., 140); Oundle; Forden; Glamis.
525. **Septoria heterochroa**, Desm. *Sacc. Syll.* 2917.  
On *Malva*. Neatishead; Shere; Findhaven.
526. **Septoria galeopsisidis**, West. *Sacc. Syll.* 2923.  
On *Galeopsis*. Abridge.
527. **Septoria stachydis**, Rob. *Sacc. Syll.* 2925.  
On *Stachys sylvatica*. Shere; Glamis; Dee; Argyle.
528. **Septoria lycopi**, Pass. *Sacc. Syll.* 2928.  
On *Lycopus europaeus*. Kew.
529. **Septoria villarsiæ**, Desm. *Sacc. Syll.* 2933.  
On *V. nymphoides*. Ely.
530. **Septoria virgaureæ**, Desm. *Sacc. Syll.* 2960.  
On *Solidago virgaurea*. Darenth (F. B. I., 144; II., 419); Gannachy; Argyle.
531. **Septoria doronici**, Pass. *Sacc. Syll.* 2972.  
On *D. pardalianches*. Kew.
532. **Septoria centaureæ**, Roum. *Sacc. Syll.* 2989.  
On *Centaurea nigra*. Kew.
533. **Septoria Mougeotii**, Sacc. *Syll.* 2998.  
On *Hieracium*. Kew.
534. **Septoria scabiosæcola**, Desm. *Sacc. Syll.* 2999.  
On *Scabiosa*. Tunbridge Wells; Highgate; Glasgow; Glen Lochay; Dee; Argyle.
535. **Septoria polygonorum**, Desm. *Sacc. Syll.* 3009.  
On *Polygonum*. Stratford-on-Avon; Highgate; Twycross; Tay.

536. **Septoria atriplicis**, Desm. *Sacc. Syll.* 3014.  
On *Atriplex*. Bristol.
537. **Septoria urticæ**, Desm. *Sacc. Syll.* 3018.  
On nettle. Forden; Neatishead; Shere; Highgate (F. B. 1., 137); Tay; Dee; Clyde; Ross.
538. **Septoria humuli**, West. *Sacc. Syll.* 3020.  
On hop. Highgate; Dartford.
539. **Septoria aristolochiæ**, Sacc. *Syll.* 3023.  
On *A. clematitis*. Kew.

C. *On fruits.*

540. **Septoria Ralfsii**, B. & Br. *Sacc. Syll.* 3028.  
On decayed apples. Penzance.

D. *On Monocotyledons.*

541. **Septoria tritici**, Desm. *Sacc. Syll.* 3042.  
On *Glyceria*. Lyndhurst.
542. **Septoria nodorum**, Berk. *Sacc. Syll.* 3044.  
On joints of wheat culms.
543. **Septoria holci**, Pass. *Sacc. Syll.* 3052.  
On *Holcus*. Lyndhurst.
544. **Septoria graminum**, Desm. *Sacc. Syll.* 3068.  
On leaves of grasses. King's Cliffe; Forden; Abinger; Lyndhurst; Forres.
545. **Septoria gracillima** Cooke. *Sacc. Syll.* 3072.  
On *Carex*. Near Edinburgh.
546. **Septoria Traillii**, Cooke. (Spores 120-130 × 3 m. 6-8 sept.)  
On *Scirpus lacustris*. Aberdeen (Prof. Traill).
547. **Septoria junci**, Desm. *Sacc. Syll.* 3087.  
On *J. maritima*. Terrington.
548. **Septoria menispora**, B. & Br. *Sacc. Syll.* 3089.  
On *Typha*. Spyre Park.
549. **Septoria majanthemi**, West. *Sacc. Syll.* 3116.  
On *Smilacina bifolia*. Ken Wood; Hampstead.

E. *On Acotyledons.*

550. **Septoria thecicola**, B. & Br. *Sacc. Syll.* 3133.  
On capsules of *Polytrichum*. Aberdeen.

GEN. 5. **PHLEOSPORA**, Wallr. (*Piptarthron, Mont.*)

Perithecia imperfectly evolved, broadly pierced, subcuticular, formed from the changed substance of the matrix. Sporules fusoid, rod-shaped, thick, 2 or more septate, hyaline.

551. **Phleospora aceris**, Lib. *Sacc. Syll.* 3135.  
On maple leaves. Forden; Darenth (F. B. II., 40); King's Cliffe; Bangor; Glamis.
552. **Phleospora mori**, Mont. *Sacc. Syll.* 3136.  
On mulberry leaves, Clevedon.

553. **Phleospora ulmi**, Fr. *Sacc. Syll.* 3138.

On elm leaves. Chislehurst; Forden; Shere (F. B. I., 207; II., 29); Hereford; Glasgow; Moray; Tay; Forth; Tweed; Solway; Clyde.

554. **Phleospora oxyacanthæ**, Kunze. *Sacc. Syll.* 3139.

On hawthorn. Albury (F. B. I., 201); Bungay; Appin; Glamis.

Fam. 2. NECTRIOIDEÆ, *Sacc. Syll.* III., 613.

Perithecia and stroma (when present) fleshy or waxy, brightly coloured, globose, or rarely hysteriform, or somewhat cup-shaped. Sporules various, hyaline.

GEN. 1. **ZYTHIA**, Fr.

Perithecia erumpent or subsuperficial, globose, more or less distinctly papillate, waxy or soft, whitish, rosy, reddish or orange. Sporules ovoid or oblong, continuous, hyaline.

555. **Zythia leucoconia** (B. & Br.), *Sacc. Syll.* 3298.

On beetroot. King's Cliffe.

GEN. 2. **POLYSTIGMINA**, *Sacc.*

Stroma growing on leaves, subdiscoid, convexo-plane, rather fleshy, bright reddish, many-celled within. Sporules filiform, continuous, hyaline.

556. **Polystigmina rubra** (Desm.), *Sacc. Syll.* 3326.

On leaves of *Prunus domestica* and *P. spinosa*. Lampeter; East Bergholt: Bungay; Thirsk.

Fam. 3. LEPTOSTROMACEÆ, *Sacc. Syll.* III., 625.

Perithecia more or less distinctly dimidiate, scutiform, astomous or ostiolate, or splitting longitudinally, membranaceous or carbonaceous, black, erumpent or superficial.

GEN. 1. **LEPTOTHYRIUM**, Kunze.

Perithecia dimidiate, scutiform, membranaceo-carbonaceous, black, astomous, or splitting, then circumscissile. Sporules ovoid-oblong or fusiform, continuous, hyaline.

557. **Leptothyrium periclymeni**, Desm. (*pictum*, B.), *Sacc. Syll.* 3330.

On honeysuckle leaves. Twycross; Glamis.

558. **Leptothyrium alneum** (Lev.), *Sacc. Syll.* 3333.

On alder leaves. Edinbro' (F. B. I., 432); Perth.

559. **Leptothyrium quercinum** (Lasch.), *Sacc. Syll.* 3340.

On oak leaves. Darenth.

560. **Leptothyrium castaneæ**, Spr. *Sacc. Syll.* 3341.

On chestnut leaves. Shere; Darenth; Lyndhurst.

561. **Leptothyrium medium**, Cke. *Grev. XIII.*, 98.

On oak leaves. Gomshall.

var. *castanæcola*, *Cke. Grev.* XIII., 98.

On chestnut leaves. Darenth.

562. **Leptothyrium rubi** (*Duby.*), *Sacc. Syll.* 3345.  
On bramble leaves. Darenth.

563. **Leptothyrium acerinum** (*Kunze.*), *Sacc. Syll.* 3351.  
On *Acer* leaves. Shere ; Neatishead,

564. **Leptothyrium asterinum**, *Berk.* *Sacc. Syll.* 3363.  
On *Aster tripolium*. Fleetwood.

565. **Leptothyrium vulgare**, *Fr.* *Sacc. Syll.* 3370.  
On herb stems. Southgate.

566. **Leptothyrium litigiosum**, *Desm.* *Sacc. Syll.* 3385.  
On ferns. Darenth (F. B. I., 335) ; Westwater ; Shrewsbury ; Lyndhurst.

GEN. 2. **PIGGOTIA**, *B. & Br.* *Sacc. Syll.* III., 636.

Perithecia flattened, unequal, thinly membranaceous, at first covered by the very thin cuticle. Sporules oblong or somewhat cylindrical, continuous, hyaline or yellowish.

567. **Piggotia astroidea**, *B. & Br.* *Sacc. Syll.* 3387.  
On elm leaves. Highgate ; Stoke Edith ; Twycross.

GEN. 3. **MELASMIA**, *Lev.* *Sacc. Syll.* III., 637.

Perithecia dimidiate, plane, astomous or rimose, membranaceous, black, stroma effused, becoming blackened, often innate. Sporules sausage-shaped, continuous, hyaline.

568. **Melasmia acerina**, *Lev.* *Sacc. Syll.* 3390.  
On maple leaves. Very common.

569. **Melasmia punctata**, *Sacc. Syll.* 3391.  
On maple leaves. Norfolk ; Roslyn.

GEN. 4. **LEPTOSTROMA**, *Fr.* *Sacc. Syll.* III., 639.

Perithecia dimidiate, flattened, elongated, black, often shining, more or less splitting in a hysteriform manner. Sporules ovoid-oblong or allantoid, continuous, hyaline.

570. **Leptostroma virgultorum**, *Sacc. Syll.* 3399.  
On bramble twigs. Fineshade ; Bungay ; Weybridge ; Barnet ; Cotterstock.

571. **Leptostroma scirpinum**, *Fr.* *Sacc. Syll.* 3427.  
On *Scirpus*, &c. Berwick.

572. **Leptostroma caricinum**, *Fr.* *Sacc. Syll.* 3431.  
On *Carices*. Cloud Wood ; Glamis.

573. **Leptostroma pteridis**, *Ehr.* *Sacc. Syll.* 3433.  
On *Pteris*.

574. **Leptostroma filicinum**, *Fr.* *Sacc. Syll.* 3434.  
On *Pteris*. Shrewsbury ; Highgate (F. B. I., 334) ; Forde ; Appin ; Glasgow ; Edinbro' ; Berwick ; Twycross ; Darenth ; Lyndhurst ; Kew.

575. **Leptostroma herbarum**, *Link.* *Sacc. Syll.* 3436.  
On herb stems. Kinross ; Berwick.

576. **Leptostroma spirææ**, Fr. *Sacc. Syll.* 3440.

On *Spiræa ulmaria*. Forden; Southgate; King's Cliffe; Berwick; Perth; Appin; Baldovan.

GEN. 5. **LABRELLA**, Fr. *Sacc. Syll.* III., 647.

Perithecia innate, often spurious, black, rounded or unequal, dehiscing with a fissure. Sporules oblong, fusiform, or globose, continuous, hyaline.

577. **Labrella coryli** (Rob.), *Sacc. Syll.* 3453.

On hazel leaves. Highgate (F. B. I., 154); Swanscombe.

GEN. 6. **DISCOSIA**, Lib. *Sacc. Syll.* III., 653.

Perithecia dimidiate, disciform, subsuperficial, soon falling away, black, often shining, astomous or ostiolate, membranaceous. Sporules oblong, allantoid, two or many septate, often three septate, with a cilium at each end, hyaline.

578. **Discosia artocreas** (Tode), *Sacc. Syll.* 3485.

On leaves, *Fagus*, &c. Shere; Perth.

579. **Discosia alnea** (Pers.), *Sacc. Syll.* 3486.

On alder leaves. Appin; Edinbro'.

GEN. 7. **ACTINOTHYRIUM**, Kunze. *Sacc. Syll.* III., 658.

Perithecia dimidiate, clypeate, rather fugitive, not, or scarcely gaping, membranaceous, with a radiating fimbriate margin. Sporules filiform, hamate, hyaline.

580. **Actinothyrium graminis**, Kunze. *Sacc. Syll.* 3507.

On grasses. Shere; Appin.

GEN. 8. **LEPTOSTROMELLA**, *Sacc. Syll.* III., 659.

Perithecia covered by the epidermis, then subsuperficial, elongated, depressedly convex, somewhat carbonaceous, black, splitting with a more or less manifest longitudinal fissure. Sporules rod-like or filiform, continuous or septate, hyaline.

581. **Leptostromella juncinum**, Fr. *Sacc. Syll.* 3516.

On rushes. Norfolk (F.B. I., 433); King's Cliffe; Leicester.

582. **Leptostromella pteridina**, *Sacc. Syll.* 3517.

On *Pteris*. Shere.

Fam. 4. **EXCIPULACEÆ**, *Sacc. Syll.* III., 664.

Perithecia cup-shaped, or patellate, or excipuliform, or hysteriform, at first somewhat spherical, but soon broadly open, membranaceous or carbonaceous, black, erumpent or superficial, smooth or hairy.

GEN. 1. **EXCIPULA**, Fr. *Sacc. Syll.* III., 665.

Perithecia innato-erumpent, excipuliform or cup-shaped, membranaceous or rather coriaceous, black, smooth, with an entire orbicular mouth. Sporules oblong or elongated, continuous, hyaline.

583. **Excipula petiolicola**, Fckl. *Sacc. Syll.* 3526.

On petioles of *Tilia*.

GEN. 2. **DISCULA**, *Sacc. Syll. III.*, 674.

Perithecia disc-shaped, or patellate, often imperfect, covered by the epidermis, which at length splits into teeth. Sporules ellipsoid or oblong, continuous, hyaline or slightly coloured.

584. **Discula platyspora** (*B. & Br.*), *Sacc. Syll.* 3565.  
On branches of *Platanus*. Batheaston.
585. **Discula microsperma** (*B. & Br.*), *Sacc. Syll.* 3571.  
On twigs of *Salix*.
586. **Discula Desmazierii** (*B. & Br.*), *Sacc. Syll.* 3932.  
On branches of *Tilia*. Kew.

GEN. 3. **SPORONEMA**, *Desm. Sacc. Syll. III.*, 677.

Perithecia covered by the epidermis, then erumpent, at first closed, at length splitting into numerous teeth. Nucleus discoid, rather soft. Spores ovoid or cylindrical, continuous, hyaline.

587. **Sporonema phacidoides**, *Desm. Sacc. Syll.* 3584.  
On leaves of *Medicago*.
588. **Sporonema obturata** (*Fr.*), *Sacc. Syll.* 3588.  
On ling.
589. **Sporonema strobilinum**, *Desm. Sacc. Syll.* 3590.  
On fir and larch scales. Highgate (F. B. I., 341).

GEN. 4. **PSILOSPORA**, *Rabh. Sacc. Syll. III.*, 679.

Perithecia innato-superficial, oblong or unequal, somewhat two-lipped, black, often densely gregarious, on living bark. Spores ellipsoid or oblong, continuous, hyaline.

590. **Psilospora faginea**, *Rab. Sacc. Syll.* 3594.  
On bark of *Fagus*. Epping.
591. **Psilospora quercus**, *Rabh. Sacc. Syll.* 3595.  
On oak bark. Lyndhurst ; Epping ; Leicester.

GEN. 5. **AMEROSPORIUM**, *Speg. Sacc. Syll. III.*, 680.

Perithecia somewhat cup-shaped, setulose. Spores cylindrically elliptical, not ciliate.

592. **Amerosporium congregatum** (*Cooke*), *Sacc. Syll.* 3598.  
On *Euphorbia sylvatica*. Darenth.
593. **Amerosporium macrotrichum** (*B. & Br.*), *Sacc. Syll.* 3602.  
On branches of *Ulex*.
594. **Amerosporium chætostroma** (*B. & Br.*), *Sacc. Syll.* 3604.  
On ash branches. Somerset.

GEN. 6. **DINEMASPORIUM**, *Lev. Sacc. Syll. III.*, 683.

Perithecia cup-shaped, superficial, black, clad with rigid brown setæ. Spores oblong or sausage-shaped, continuous, hyaline, ciliate at each end.

595. **Dinemasporium graminum**, *Lev. Sacc. Syll.* 3610.  
On grasses. Forden ; Northamptonshire.
596. **Dinemasporium strigosum** (*Fr.*), *Sacc. Syll.* 3611.  
On culms of grass. Appin.

# Grevillea,

A QUARTERLY RECORD OF CRYPTOGAMIC BOTANY  
AND ITS LITERATURE.

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## PRÆCURSORES AD MONOGRAPHIA POLYPORORUM.

(Continued from page 87.)

GEN. IV. **PORIA.** Pers. Syn. p. 542.

Resupinata, effusa, superne porosa. Pileo plerisque oblitterato. Substantia carnosa, stuposa, coriacea, vel membranacea.

**A. Mollusci.** Pileus late expansus, carnosus, mollis, poris plerisque minutis, æqualibus, rotundatis.

\* *Poris persistenter albis.*

† hymenio fatiscente.

946 vulgaris, *Fr. Hym. Eur.* 578.

947 mollusca, *Fr. Hym. Eur.* 578.

948 elachista, *Berk. in Cke. Syn. Poly.* 138.

— *minimus*, Rav. *Grev. i.* 65.

949 hyalina, *Berk. Fl. Tasm. ii.* 255.

950 interna, *Schw. Amer. Bor.* 469.

951 rivulosa, *B. & C. Linn. Journ. x.* 318.

952 sassafras, *Schw. Amer. Bor.* 437.

953 subvineta, *B. & Br. Linn. Journ. xiv.* 53.

954 hybrida (*Sow.*), *Fr. Hym. Eur.* 581.

†† hymenio vix fatiscente.

955 mucida, *Pers. Syn.* 546.

956 medulla-panis, *Pers. Syn.* 544.

957 calcea, *B. & Br. Linn. Journ. xiv.* 55.

958 niphodes, *B. & Br. Linn. Journ. xiv.* 55.

\*\* *Poris albis, demum ochraceo-pallidis.*

959 vitræa, *Pers. Obs. i.* 15.

— *xylostromeus*, *Pers. Myc. Eur. ii.* 112.

960 hydnophora, *B. & Br. Linn. Journ. xiv.* 55.

961 tarda, *Berk. Hook. Journ. 1845*, 56.

- 962 tuberculosa, *Pers. Obs.* i. 14.  
 963 deglubens, *Berk. Hook. Journ.* 1856, 235.  
 964 tremor, *B. & C. Grev.* i. 54.  
 965 lacrymans, *Sauter. Hedwigia.* xv. 150.  
 966 hypolateritia, *Berk. in Herb.* No. 2856.  
 967 subliberata, *B. & C. Linn. Journ.* x. 318.  
 968 fulgens, *Rost. Poly.* iv. t. 63.  
 969 eupora, *Karst. Not. Soc. Fenn.* ix. 360.  
 970 Rostafinskii, *Karst. Fl. Fenn.* iii. 274.  
 971 nitida, *Fr. Hym. Eur.* 574.  
 972 callosa, *Fr. Hym. Eur.* 577.  
 973 obducens, *Pers. Myc. Eur.* ii. 104.

\* \* *Poris flavidis vel aureis.*

- 974 fusco-marginata *Berk. in Herb.* No. 2857.  
 975 attenuata, *Peck. 26th Report*, p. 79.  
 976 parilis, *Fr. Plant. Preiss.* 136.  
 977 Læstadii, *B. & Fr. Grev.* xii. 69.  
 978 crocipora, *B. & C. in Curt. Cat.*  
     = *croceus*, Schw.  
 979 auriculaeformis, *Jungh. Ann. Sci. Nat.* 1844, 194.  
 980 vitellina, *Schw. in Fr. Epic.* 483.  
 981 phlebiaeformis, *Berk. in Herb.* 2833 (Cuba).  
 982 tegillaris, *Berk. in Herb.* No. 2855.

\*\* *Poris carneis.*

- 983 cincta, *Berk. Outl.* 250.  
 984 makraulos, *Rost. Poly.* iv. 55.  
 985 rhodella, *Fr. Hym. Eur.* 573.  
 986 epilinea, *B. & Br. Linn. Journ.* xiv. 55.  
     = *rufo-lateritus*, Kalch. *Grev.* x. 104.  
 987 vincta, *Berk. Ann. Nat. Hist.* 1852, 196.  
 988 hyposclera, *Berk. Grev.* x. 103.  
 989 carneo-pallens, *Berk. Hook. Journ.* 1856, 237.  
 990 roseo-alba, *Jungh. Fl. Java* 43.  
 991 placenta, *Fr. Hym. Eur.* 572.  
 992 rixosa, *Karst. in Thum. Myc. Univ.* 1204.

\*\*\* *Poris rubris.*

- 993 fusco-carnea, *Pers. Myc. Eur.* ii. 97.  
 994 cruentata, *Mont. Syll.* 161.  
 995 juglandina, *Schw. Syn. Car.* 926.  
 996 spissa, *Fr. Elen.* i. 111.  
 997 rufa, *Fr. Hym. Eur.* 573.  
     = *haematodes*, *Rost. Poly.* iv. t. 62.

\*\*\* *Poris purpureis violaceisve.*

- 998 atro-vinosa, *Cke. Grev.* x. 131.  
 999 nigro-purpurea, *Schw. Syn. Car.* 925.

\*\*\*\* *Poris griseis, cinereisve.*

- 1000 favillacea, *B. & C. Grev.* i. 53.  
 1001 Salleana, *Berk. in Herb.* No. 2826.  
 1002 cinerea, *Schw. Amer. Bor.* 440.  
 1003 tephropora, *Mont. Syll.* 161.  
     = *surinamensis*, *Mont. Ann. Sci. Nat.* xx. 363.  
 1004 Victoriae, *Berk. Grev.* x. 103.  
 1005 livida, *Cke. Grev.* x. 131.  
 1006 caryæ, *Schw. Amer. Bor.* 441.  
 1007 gallogrisea, *Berk. in Herb.* No. 2863.  
 1008 Lindbladii, *B. Grev.* i. 54.  
 1009 sarawacensis, *B & Ces. in Herb.* No. 2936.

\*\*\*\* *Poris fuligineis nigrescentibus.*

- 1010 niger, *Berk. Hook. Journ.* iv. 304.  
 1011 fuligo, *B. & Br. Linn. Journ.* xiv. 53.  
 1012 ravenalæ, *B. & Br. Linn. Journ.* xiv. 53.  
 1013 luctuosa, *Ces. Fungi Born.*

\*\*\*\*\* *Poris fuscis v cinnamomeis.*

- 1014 emollita, *Fr. Hym. Eur.* 571.  
 1015 Blyttii, *Fr. Hym. Eur.* 571.  
 1016 Wirtgeni, *Fr. Hym. Eur.* 570.  
 1017 floccosa, *Fr. Hgm. Eur.* 572.  
 1018 benetosta, *Berk. Linn. Journ.* xvi. 52.  
 1019 fusco-lutescens, *Fckl. Symb.* 18.

\*\*\*\*\* *Poris ferrugineis v. spadiceis.*

- 1020 unita, *Pers. Myc. Eur.* ii. 93.  
 1021 sorbicola, *Wein. Fr. Hym. Eur.* 570.  
 1022 Carteri, *Berk. in Herb.* No. 2806.  
 1023 punctata, *Fr. Hym. Eur.* 572.  
 1024 collabens, *Fr. Hym. Eur.* 572.  
 1025 geogena, *B. & C. in Herb.* Berk. 2827.  
 1026 umbrina, *Rost. Poly.* 27 t. 6.  
 1027 rufitincta, *B. & C. in Herb.* Kewensis (Cuba).

**B. Vaporarii.** Pileus late expansus, carnosus, poris inæqualibus, angulatis, vulgo majusculis.

\* *Poris persistenter albis.*

- 1028 radula, *Fr. Hym. Eur.* 578.  
 1029 candidissima, *Schw. Amer. Bor.* 468.  
 1030 papyracea, *Schw. Amer. Bor.* 442.  
 1031 xylostromatis, *Fckl. Supp.* 86.  
 1032 bullosa, *Wein. Ross.* 336.  
 1033 vaporaria, *Fr. Hym. Eur.* 579.  
     = *cellaris*, *Lib. Crypt. Exs.*

- 1034 salviæ, *B. & C. Grev.* i. 54.  
 1035 hibernica, *B. & Br. Dec. Fungi* No. 1291.  
 1036 Gordoniensis, *B. & Br. Dec. Fungi* No. 1023.  
 1037 Vaillantii, *Fr. Hym. Eur.* 579.  
 1038 clathrata, *B. & C. Grev.* i. 54.  
 1039 pinguedinis, *Gaill. ex herb. Desmazieres.*

\*\* *Poris albido-lutescentibus, vel decolorantibus.*

- 1040 sanguinolenta, *Fr. Hym. Eur.* 578.  
 1041 flavipora, *B. & C. in Herb. Berk.* 2839.  
 1042 dentipora, *Pers. Myc. Eur.* ii. 104.  
 1043 hians, *Karst. F. Fenn.* 619.  
 1044 chrysoloma, *Fr. Hym. Eur.* 574.  
 1045 bombycina, *Fr. Hym. Eur.* 575.  
     = *racodioides*, *Pers. Myc. Eur.* ii. 113 ?  
 1046 hymenocystis, *B. & Br. Ann. N. Hist.* 1810.  
 1047 auricoma, *Lev. in Herb. Berk.*  
 1048 aneirina, *Somm. Lapp.* 276.  
 1049 ramentacea, *B. & Br. Ann. Nat. Hist.* No. 1809.  
 1050 dryina, *B. & Cke. Grev.* vi. 130.  
 1051 membranicincta, *Berk. in Herb.* No. 2909.  
 1052 metamorphosa, *Fckl. Symb. Myc. App.* iii. 5.  
 1053 carbæformis, *B. & C. Grev.* i. 53.  
 1054 variecolor, *Karst. in Thum. Myc. Un.* 1803.  
 1055 viridans, *B. & Br. Dec. Fungi* 347.  
 1056 aprica, *Berk. Fl. Tasm.* ii. 254.  
 1057 late marginata, *Mont. Syll.* 163.  
 1058 leucolomea, *Lev. Ann. Sci. Nat.* 1846, 140.  
 1059 Rennyi, *B. & Br. Ann. Nat. Hist.* No. 1433.  
 1060 xantha, *Fr. Hym. Eur.* 574.  
 1061 aurantio-pallens, *B & C. Grev.* i. 53.

\*\* *Poris subaureis.*

- 1062 merulina, *Berk. Fl. Tasm.* 254.  
 1063 mellea, *B. & Br. Linn. Journ.* xiv. 53.  
 1064 chrysea, *Lev. Ann. Sci. Nat.* 1846, 301.

\*\* *Poris carneis v. rubris.*

- 1065 incarnata, *Alb. & Schw. Consp.* 250.  
 1066 micans, *Ehr. Sylv. Ber.* 30.  
 1067 porriginosa, *Berk. in Herb.* No. 2934.  
 1068 pyrrhopora, *Mont. Syll.* 162.  
 1069 salmonicolor, *B. & C. Grev.* i. 53.  
 1070 oxydata, *B. & C. Linn. Journ.* x. 317.

\*\*\* *Poris purpureis violaceisve.*

- 1071 violacea, *Fr. Hym. Eur.* 572.  
 1072 purpurea, *Fr. Hym. Eur.* 572.

\*\*\* *Poris cinerascentibus vel nigrescentibus.*

- 1073 Nordmanni, *Lev. in Demid. Voy. ii.* 93, *t. 1, f. 1.*  
 1074 carbonacea, *B. & C. Linn. Journ. x.* 317.

\*\*\* *Poris olivaceis.*

- 1075 chrysobapha, *B. & C. Grev. i.* 53.  
 1076 cerea, *Berk. Hook. Journ.* 1852, 163.

\*\*\* *Poris fuscis v. cinnamomeis.*

- 1077 subneris, *Mont. Syll.* 162.  
 1078 superficialis, *Schw. Syn. Car.* 924.  
 1079 disciformis, *Lev. Ann. Sci. Nat.* 1844, 193.

\*\*\*\* *Poris ferrugineis v. spadiceis.*

- 1080 portoricensis, *Fr. Epic.* 483.  
 1081 subspadicea, *Fr. Syst. Myc. i.* 378.  
 1082 argillacea, *Cke. Grev. vii. 1.*  
 1083 decolorans, *Schw. Amer. Bor.* 467.

**C. Rigidi.** Pileus effusus, coriaceus, siccus, tenax; poris majusculis, rotundatis subhexagonis vel angulatis, subæqualibus; dissepimentis curtis rigidis.

\* *Poris albis.*

- 1084 leucoplaca, *Berk. Fl. N. Zeal. ii.* 180.  
 1085 corticola, *Fr. Hym. Eur.* 580.

\*\* *Poris albis decolorantibus.*

- 1086 sinuosa, *Fr. Hym. Eur.* 576.  
 1087 rhododendri, *Schw. Am. Bor.* 436.  
 1088 interrupta, *B. & Br. Linn. Journ.*  
 1089 alabamæ, *B. & Cke. Grev. vi.* 130.  
 1090 Beaumontii, *B. & C. in Herb. Berk.* 2919.  
 1091 pulchella, *Schw. Amer. Bor.* 426.  
     — *xanthus*, *Schw. Amer. Bor.* 424.  
 1092 holoxantha, *B. & Cke. in Rav. Amer. Fungi.* No. 213.  
 1093 omæma, *Berk. in Herb.* No. 2837 (U. States).  
 1094 tomentocincta, *B. & Rav. in Herb. Berk.* 2858.  
 1095 xantholoma, *Schw. Amer. Bor.* 435.  
 1096 subaurantia, *Berk. in Herb.* 2859.  
 1097 limitata, *B. & C. Grev. i.* 54 (nec. i. 66).  
 1098 melanoleuca, *Lev. Ann. Sci. Nat.* 1846, 141.

\*\* *Poris lignicoloribus vel cervinis.*

- 1099 diversipora, *B. & Br. Linn. Journ. xiv.* 53.  
 1100 cavernulosa, *Berk. Linn. Journ.* 1856, 235.  
 1101 subfusco-flavida, *Rost. Poly.* 27 *t. 11.*  
 1102 favescens, *Schw. Amer. Bor.* 413.

- 1103 hydnopora, *B. & Glaz. Videns. Med. Kjob.* 1879, 31.  
 1104 hyperborea, *Berk. in Herb. Kewensis* (Arctic America).  
 1105 variolosa, *B. & Br. Linn. Journ.* xiv. 52.

\* \* \* *Poris carneis vel rufis.*

- 1106 anæctopora, *B. & C. Linn. Journ.* x. 318.

\* \* \* *Poris flavidis.*

- 1107 chromatica, *B. & Cke. Linn. Journ.* xv. 384.

\* \* \* *Poris fuscis v. cinnamomeis.*

- 1108 lævigata, *Fr. Hym. Eur.* 571.  
 1109 palmicola, *B. & C. Linn. Journ.* x. 317.  
 1110 apposita, *Lev. Ann. Sci. Nat.* 1846, 141.

\* \* \* \* *Poris ferrugineis vel spadiceis.*

- 1111 ferruginosa, *Fr. Syst. Myc.* i. 378.  
     = *corium*, Kunze in *Herb. Berk.*  
 1112 subiculosa, *Peck 31 Report* 37.  
 1113 contigua, *Fr. Syst. Myc.* i. 378.  
 1114 viticola, *Schw. Amer. Bor.* 423.  
 1115 cryptacantha, *Mont. Ann. Sci. Nat.* v. 369.  
 1116 byssogena, *Jungh. Fl. Java* 43.  
 1117 orbicularis, *Berk. Ann. Nat. Hist.* iii. 324.

D. **Reticulati.** Pileus irregulariter effusus, plerumque incrusterans, tenuis, membranaceus. *Poris majusculis*, distantibus, cupulæformibus, dissepimentis brevissimis subvenulosis.

\* *Poris persistenter albis.*

- 1118 dictyopora, *Cke. Grev.* xii. 17.  
 1119 incrustans, *B. & C. Grev.* i. 54.  
 1120 reticulata, *Fr. Hym. Eur.* 580.  
 1121 caleea, *Schw. Amer. Bur.* 448.  
 1122 farinella, *Fr. Hym. Eur.* 579.  
 1123 collabefacta, *B. & Br. Ann. Nat. Hist.* No. 1432.  
 1124 fatiscens, *B. & Rav. Grev.* i. 65.  
 1125 blepharistoma, *B. & Br. Ann. Nat. Hist.* 1434.  
 1126 leptoderma, *B. & Br. Linn. Journ.* xiv. 54.

\*\* *Poris albis decolorantibus.*

- 1127 arenaria, *Klot. in Fr. Epicr.* 487.  
 1128 tenella, *B. & Cke. Grev.* vi. 81.  
 1129 tenuis, *Schw. Amer. Bor.* 456.  
 1130 cincinnati, *Berk. in Herb.* No. 2920.  
 1131 porotheloides, *B. & C. in Herb. Berk.* 2889.  
 1132 xylostromatoides, *Berk. Hook. Journ.* 1843, 638.  
 1133 vesiculosus, *B. & C. Grev.* i. 65.

- 1134 semitincta, *Peck 31st Report*, 37.  
 1135 indurata, *Peck 31st Report*, 37.  
 1136 subgelatinosa, *B. & Br. Ann. Nat. Hist.* 1569.  
 1137 terrestris, *Fr. Hym. Eur.* 576.

\* \* *Poris carneis vel rubris.*

- 1138 pellicula, *Jungh. Fl. Java* 44.  
 1139 Archeri, *Berk. Fl. Tasm.* ii. 255.  
 1140 crustacea, *Lev. Ann. Sci. Nat.* 1844, 193.

\*\* *Poris ferrugineis v. spadiceis.*

- 1141 tenerima, *B. & Rav. Grev.* i. 65.  
 1142 nebulosa, *B. & C. Linn. Journ.* x. 317.

#### E. Species incertæ sedis.

- 1143 bathypora, *Rost. Poly.* 4 t. 59.  
 1144 epiptelia, *Fr. Mon.* ii. 270.  
 1145 megalopora, *Pers. Myc. Eur.* ii. 88.

N.B.—Corrections, explanations, and additions to these lists are reserved for the next number of this journal.

## FUNGI OF NEW GUINEA.

By M. C. COOKE.

### HYMENOMYCETES.

- Schizophyllum commune*, *Fr.* S. Coast. (*Armit.*)  
*Panus torulosus*, *Fr.* S.E. Coast. (*Armit.*)  
*Lentinus Lecomtei*, *Fr.* S. East Coast. (*Armit.*)  
 " *tener*, *Kl.* S.E. Coast. (*Armit.*)  
 " *calvescens*, *Berk.* S. Coast. (*Armit.*)  
 " *pergamenus*, *Lev.* S.E. Coast. (*Armit.*)  
 " *subnudus*, *Berk.* Strickland River (59).  
 " *inquinans*, *Berk.* Strickland River (60).  
 " *radicatus*, *Cooke.* Strickland River.  
 " *velutinus*, *Fr.* S.E. Coast; Fly River (118); St. George's River; S.E. Coast. (*Armit.*)  
*Lenzites corrugata*, *Kl.* S.E. Coast. (*Armit.*)  
 " *applanata*, *Fr.* Jala River.  
 " *deplanata*, *Fr.* S.E. Coast; St. George's River.  
 " *aspera*, *Kl.* Jala River.  
*Polyporus (Melan) elegans*, *Fr.* S. Coast. (*Armit.*)  
 " (*Petal*) *grammocephalus*, *B.* Strickland River.  
 " (*Petal*) *russiceps*, *B. & Br.* Strickland River; Fly River.

- Polyporus (Moll.) verecundus, *B.* & *C.* Strickland River.  
 " (Dichr.) rubidus, *B.* S.E. Coast. (*Armit.*)  
 " (Dichr.) scruposus, *Fr.* S.E. Coast. (*Armit.*)  
 " (Dichr.) isidioides, *B.* S.E. Coast. (*Armit.*)  
 " (Dichr.) demissus, *B.* S.E. Coast. (*Armit.*)  
 " (Hisp.) cuticularis, *Fr.* Strickland River.  
 " (Sub.) portentosus), *B.* S.E. Coast. (*Armit.*)  
 " (Lign.) auberianus, *Mont.* Strickland River.  
 " (Lign.) zonalis, *B.* S.E. Coast. (*Armit.*)  
 " (Lign.) anebus, *B.* Strickland River.  
 " (Lign.) atypus, *Lev.* Strickland River.  
 " (Lign.) vinosus, *Berk.* S.E. Coast.
- Fomes (Mes.) rugosus, *Nees.* S.E. Coast. (*Armit.*)  
 " (Pleur.) longipes, *Lev.* Strickland River.  
 " (Pleur.) lucidus, *Fr.* S.E. Coast. (*Armit.*)  
 " (Pleur.) superpositus, *B.* Strickland River.  
 " (Meris.) senex, *Nees.* Strickland River.  
 " (Foment) australis, *Fr.* Strickland River ; S.E. Coast.  
 " (Foment) nigrolaccatus, *Cke.* S.E. Coast.  
 " (Foment) fomentarius, *Fr.* Strickland River.  
 " (Foment) scalaris, *B.* S.E. Coast. (*Armit.*)  
 " (Foment) pyrrhocreas, *Cke.* S.E. Coast.  
 " (Imp.) holoscelerus, *B.* S.E. Coast.  
 " (Imp.) spadiceus, *B.* Strickland River.  
 " (Imp.) inflexibilis, *B.* Strickland River.  
 " (Imp.) pectinatus, *Kl.* S.E. Coast.  
 " (Imp.) caliginosus, *B.* S.E. Coast.  
 " (Imp.) loricatus, *P.* Strickland River.  
 " (Lævi) connatus, *Fr.* Strickland River.  
 " (Lævi) hemitephrus, *B.* S.E. Coast.  
 " (Lævi) ferreus, *B.* Strickland River ; Fly River.  
 " (Lævi) incrassatus, *B.* S.E. Coast.  
 " (Resup.) bistratosus, *B.* & *Cke.* Strickland River.
- Polystictus (Særi) xanthopus, *Fr.* Strickland River ; Fly River.  
 " (Disci) flabelliformis, *Kl.*  
 " (Disci) Adami, *B.* S.E. Coast.  
 " (Disci) nephridius, *B.* Strickland River ; Fly River.  
 " (Disci) affinis, *Nees.*  
 " (Disci) squamæformis, *B.* S.E. Coast.  
 " (Disci) virgineus, *Fr.* Strickland River.  
 " (Disci) microcyclus, *Lev.* S.E. Coast.  
 " (Disci) malaiensis, *Cke.* Strickland River.  
 " (Disci) meleagris, *B.* Strickland River ; Fly River.  
 " (Disci) Hostmanni, *B.* Strickland River.  
 " (Disci) Menziesii, *B.* Strickland River.  
 " (Disci) sanguineus, *Fr.* St. George's River ; Strickland River.  
 " (Disci) russogramme, *B.*

- Polystictus* (*Disci*) *rasipes*, *B.* S.E. Coast.  
 " (*Prolif.*) *elongatus*, *B.* S.E. Coast.  
 " (*Stup.*) *Feei*, *Fr.* Astrolabe.  
 " (*Coria*) *pictilis*, *B.* S.E. Coast.  
 " (*Coria*) *obstinatus*, *Cke.* Strickland River.  
 " (*Coria*) *hirsutus*, *Fr.* St. George's River.  
 " (*Coria*) *Persoonii*, *Fr.* St. George's River.  
 " (*Coria*) *occidentalis*, *Fr.* S.E. Coast.  
 " (*Coria*) *Haskarlii*, *Lev.* Strickland River.  
*Poria* (*Vapo*) *Lindbladii*, *Berk.* S.E. Coast.  
 " (*Rigidi*) *corticola*, *Fr.* Strickland River.  
*Dædalea* *inconcinna*, *Berk.* S.E. Coast. (*Armit.*)  
*Trametes* *Mulleri*, *Berk.* S.E. Coast. (*Armit.*)  
 " *Sprucei*, *Berk.* S.E. Coast. (*Armit.*)  
 " *lactinea*, *Berk.* Strickland River (55).  
*Hexagona* *apiaria*, *Fr.* S.E. Coast. (*Armit.*)  
 " *favolooides*, *Cooke.* Strickland River.  
 " *polygramma*, *M.* S.E. Coast. (*Armit.*)  
 " *tenuis*, *Hook.* Strickland River, 34. (*Armit.*)  
*Favolus* *alutaceus*, *B.* & *M.* Strickland River (21).  
 " *multiplex*, *Lev.* S.E. Coast. (*Armit.*)  
 " *Brasiliensis*, *Lev.* S.E. Coast. (*Armit.*)  
*Laschia* *tremellosa*, *Fr.* S.E. Coast. (*Armit.*)  
*Hydnnum* (*Apus*) *luteovirens*, *Ces.* S.E. Coast.  
*Irpex* *flavus*, *Jungh.* S.E. Coast.  
*Cladoderris* *dendritica*, *P.* Strickland River.  
*Thelephora* *lamellata*, *B.* S. Coast. (*Armit.*)  
 " *regularis*, *Schw.* Strickland River.  
*Lachnocladium* *furcellatum*, *Lev.* Fly River.  
*Stereum* (*Mes.*) *elegans*, *Fr.* S.E. Coast.  
 " (*Mes.*) *Mellisii*, *B.* S.E. Coast.  
 " (*Mes.*) *Thozetii*, *B.* S.E. Coast.  
 " (*Mes.*) *cyathiforme*, *Fr.* S.E. Coast.  
 " (*Apus*) *lobatum*, *Kze.* Fly River ; Strickland River ;  
     Astrolabe ; S. Coast.  
 " (*Apus*) *Boryanum*, *Fr.* S.E. Coast.  
 " (*Apus*) *involutum*, *Kl.* Fly River ; Strickland River  
 " (*Apus*) *bicolor*, *Fr.* S.E. Coast.  
*Hymenochaete* *phaea*, *B.* Strickland River.  
*Corticium* *læve*, *Fr.* Strickland River.  
 " *cœruleum*, *Fr.* Strickland River.  
*Dictyonema* *membranacea*, *Ag.* Strickland River ; S.E. Coast.  
*Hirneola* *auricula judaæ*, *Fr.* Strickland River.  
 " *polytricha*, *M.* S.E. Coast.

## GASTEROMYCETES.

*Scleroderma bovista*, *Fr.* Strickland River ; S.E. Coast. (*Armit.*).

## MYXOMYCETES.

*Stemonitis fusca*, *Roth.* Strickland River.

## DISCOMYCETES.

*Peziza* (*Trichoseypha*) *Hindsii*, *B.* Fly River; Strickland River; S.E. Coast.

## PYRENOMYCETES.

*Xylaria dealbata*, *B.* & *C.* Strickland River.

„ *allantoidea*, *M.* Strickland River.

„ *involuta*, *Kl.* S.E. Coast. (*Armit.*)

**Lentinus radicatus**, *Cooke.*

Pileo infundibuliformi, carnoso, rigido, pallido-ochraceo, brevisime velutino, laevi (4-5 unc. diam.). Stipite deorsum incrassato, concolore, velutinoque, solido (4 unc. long,  $\frac{1}{2}$ - $\frac{3}{4}$  unc. lat.), radicato (ad 2 unc. long). Lamellis linearibus, angustis (vix 1 lin.) decurrentibus, confertis, postice lineatis.

On the ground. Strickland River; New Guinea.

**Hexagona favoloides**, *Cooke.*

Pileo reniformi, sessili, ochraceo-albo, velutino, subplano (2-3 unc. lat.), postice crassiusculo ( $\frac{1}{2}$  in.), margine subacuto. Hymenio convexo. Poris magnis, hexagonoideis ( $\frac{1}{5}$ - $\frac{1}{4}$  unc. lat.) obtusis, profundis, ad periphericis minoribus.

On wood. Strickland River; New Guinea (No. 20).

## FLORA OF BRITISH FUNGI.

The first volume of the work which we announced two years ago under the above title has just been issued under the name of "Hymenomycetes Britannici, British Fungi (Hymenomycetes)." There are reasons, not far to seek, why we should hesitate to pronounce any opinion on this volume, which, being written for *scholars* rather than for mycologists, omits the following species mostly figured in the 3rd and 4th vols. of "Illustrations of British Fungi":—

<i>Agaricus</i> ( <i>Pluteus</i> ) <i>ephebius</i> , <i>Fr.</i> <i>Grev.</i> xiii, 90,			
	<i>Illust. t.</i>		517
„ „ <i>pellitus</i> , <i>Pers. Grev.</i> xiv, 37 ...			597
„ „ <i>semibulbosus</i> , <i>Lasch Grev.</i> , xiii, 89			518
„ „ <i>violarius</i> , <i>Massee Grev.</i> xiii, 89			518
„ „ <i>roseo-albus</i> , <i>Fr. Grev.</i> xiv, 37...			598
„ „ <i>liquescens</i> , <i>Cooke Grev.</i> xiv, 121			581
„ ( <i>Acetabularia</i> ) <i>acetabulosus</i> ( <i>Sow.</i> ) <i>B. &amp; Br.</i>			
„ „ <i>Ann. N.H.</i> : No. 1859. ...			345
„ ( <i>Pholiota</i> ) <i>cruentatus</i> , <i>C. &amp; S.</i> ...			502
„ ( <i>Inocybe</i> ) <i>incarnatus</i> , <i>Bres. Grev.</i> xiii, 58...			473
„ „ <i>schistus</i> , <i>Oke.</i> ...			504
„ „ <i>margarispora</i> , <i>B.</i> ...			505
„ „ <i>perbrevis</i> , <i>Weinm. Grev.</i> xiii, 90			519

Agaricus (Flammula)	clitopilus, <i>Cooke Grev.</i> xiii, 59	500
" "	filius, <i>Fr. Ic. Grev.</i> xiii, 45	432
" "	ochrochlorus, <i>Fr. Grev.</i> xiv, 37	616
" (Naucoria)	glandiformis, <i>C. &amp; S. Grev.</i> xiii, 59	490
" "	arvalis, <i>Sm. Grev.</i> xiii, 59	479
" "	latissimus, <i>Cke. Grev.</i> xiii, 60...	482
" "	porriginosus, <i>Fr.</i> ...	510
" (Tubaria)	trigonophyllus, <i>Fr.</i> ...	483
" "	pellucidus, <i>Bull</i> ...	...
" (Crepidotus)	palmatus, <i>Bull. B. &amp; Br. Ann.</i> <i>Nat. Hist.</i> No. 1855	...
" "	epigaeus, <i>P. Grev.</i> x, 152	516
" (Psalliota)	augustus, <i>Fr. Grev.</i> xiii, 90	521
" "	pratensis, <i>Schæff Grev.</i> xiii, 90	525
" "	subgibbosus, <i>Fr. Grev.</i> xiii, 91	532
" (Pilosace)	Algeriensis, <i>Fr.</i> ...	618
" (Stropharia)	coronillus, <i>Bull</i> ...	535
" "	luteo-nitens, <i>Fr.</i> ...	604
" "	spintriger, <i>Fr. W. G. S. in Gard. Chron.</i> ...	542
" "	hypsipus, <i>Fr. Grev.</i> xiv, 38	619
" (Hypholoma)	punctulatus, <i>Kalch</i> ...	587B
" "	œdipus, <i>Cke.</i> ...	587A
" (Psilocybe)	sarcocephalus, <i>Fr. Gard. Chron.</i> Oct. 13, 1883	567, 620
" "	subericæus, <i>Fr. Grev.</i> xii, 67	588
" "	canofaciens, <i>Cke.</i> ...	621
" (Psathyra)	pellospermus, <i>Bull Grev.</i> xii, 67	577
" "	fatuus, <i>Fr.</i> ...	595A
" "	helobius, <i>Kalch. Grev.</i> xiii, 45...	579

Hence there are two subgenera omitted, and 39 species of the genus *Agaricus* with coloured spores. The omissions amongst the white-spored species are far less numerous, and might be the result of accident.

Of the species included there are two which call for special remark—

#### ***Agaricus (Inocybe) echinatus* (Roth), *Cooke Illust. t. 395.***

This species will be found under page 308, as *Agaricus (Psalliota) echinatus*, *Roth.*

We decline to express any opinion here as to which is correct, but probably it will be conceded that both are not equally accurate. Any one desirous of forming an opinion should consult Professor Saccardo's exhaustive treatise "Interno all' *Agaricus echinatus* (Roth)" in the "Bulletino della Soc. Veneto Trentina di Scienze naturali in Padova," No. 7, for 1879. In this treatise the author shows satisfactorily that the proper position for this species is in the subgenus *Inocybe*, and his views are generally accepted on the continent.

The other species which finds a place in the above work as—*Agaricus* (*Stropharia*) *obtusatus*, *Fr.* (see page 311), to illustrate which reference must be made to Bresadola's "Fungi Tridentini," part iv-v, pp. 56, whence it is clear that Fries, as in some other instances, failed to appreciate correctly the species figured by Bulliard, and hence the three consecutive *Ag. coronillus*, *Ag. obtusatus*, and *Ag. melaspermus* are confused and mixed up. This will be elucidated a little by reproducing Bresadola's observations, as published, leaving "scholars to examine and compare the descriptions in the original language."

**Stropharia melasperma**, *Bull.* f. 540; *Quel. Jur.* t. 24, f. 3; *Bres. Trent.* t. lxi.

Pileus carnosus e convexo planus, subdepressus, mollis, laevis, viscidulus, mox siccus, saepeque epidermide areolato-diffracta, albidus, centro stramineus  $3\frac{1}{2}$ - $4\frac{1}{2}$  cm. latus; lamellæ confertæ, ventricosæ, postice sinuato-adnatae ex albido violaceo-cinereæ, demum cinereo-nigricantes; stipes albus, farctus, subæqualis, e sericeo-fibrilloso glabrescens, apice striatus 4-6 cm. longus 6-7 mm. crassus; annulus albus, stipiti adhærens, supra dimidium striato-sulcatus, infra laevis, deciduus. Caro pilei alba, stipitis demum substraminea vix odora. Sporæ in cumulo compacto fuscæ, sub micr. fuscidulæ, ovoideæ  $10 \times 6$  mmm.; basidia clavata 22-28  $\times$  8 mmm.

Aestate, autumno. Locis herbidis, pascuis etc. raro.

Fungus hicce in Europa boreali haud videtur obvius; nam species, quae sub hoc nomine a Fries in Monogr. i, p. 413, *Icon. Select.* t. 130, f. 2, et *Hymen. Europ.*, p. 285, describitur et pingitur, nihil aliud est quam *Stropharia coronilla*, *Bull. Genuina Stropharia melasperma*, *Bull.*, neque pileo ochraceo, neque lamellis purpureis gaudet, prouti Fries suum *Ag. melaspernum* describit; hae notæ e contra *Ag. coronillo*, *Bull.*, convenient, cuius, ut melius in posterum distinguatur, hic novam diagnosim simul cum synonymia exhibemus.

**Stropharia coronilla**, *Bull.*, tab. 597. *Quélet Jur.* tab. 14, f. 7. *Agaricus phaeosporus*, *Fr. Monogr.* i, p. 413. *Agaricus melaspermus*, *Fr. Hym. Europ.* p. 285, No. 1071. *Ejusd. Icon. select.* ii, p. 30, tab. 130, f. 2. *Ag. coronillus*, *Fr. Hymen. Europ.* p. 285. *Ag. obtusatus*, *Kalchbr. Icon. Ung.* p. 31, tab. xvii, f. 2. *Saccardo Myc. Ven. Spec.*, tab. iv, fig. 21-23.

Pileus carnosus ex hemisphaerico explanato-convexus, laevis, subviscidus, ochraceo-fuscus, subexpallens, margine primitus albo-floccoso, 3-5 cm. latus; lamellæ confertæ, postice sinuato-adnatae, ex albido *purpureo-violaceæ*, demum nigricantes, acie albida sub lente pruinata; stipes albus e farcto subcaesus, fibrillosus, deorsum attenuatus, basi aequali, vel bulbillosa, 4-5 cm. longus, 3-5 mm. crassus; annulus stipiti adhaerens, in medio turgide elatus, parte superiore sulcato-plicata, plicis albis, demum e sporis violaceis. Caro alba, odore subraphanoideo praedita. Sporæ in cumulo purpureæ, sub micr. subrufescentes, 8-10  $\times$  5 mmm.; basidia clavata 20-40  $\times$  5-10; cistidia fusoideo-ventricosa apicem versus constricta.

Per annum in herbidis juxta vias in tota regione tridentina frequenter obvius, ut plurimum solitarius.

Hujus speciei iconem non damus, quia jam apud auctores l. c. bene est delineata. Kalchbrenner et Fries recte habitum referunt; Quélet vero etiam annulum optime repraesentat.

As to *Agaricus* (*Clitopilus*) carneo-albus, *With* (p. 205) we venture to think that the figures quoted "Kalchbr. Hung. t. 22, f. 2," are simply misleading, and do not represent Withering's species at all.

If scholars choose to substitute "Psaliota" for *Psalliota*, or prefer "crustuliniformis" to "erustuliniformis;" and "alkalinus" to "alcalinus" as Fries wrote it, or to write "petigenosus" for "petiginosus" the mycologists will not quarrel with them, since all cliques have their idiosyncrasies. But we doubt if zoologists would so readily admit that "nitella" is a *squirrel* so long as *Myoxus nitela* can be found in Europe to bear witness in their favour.

For the rest—"Let every man be fully persuaded in his own mind."

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## BRITISH FRESH WATER ALGÆ.

(Continued from p. 99).

### **Mesotæniū de Greyi**, *Turner Naturalist* 1886, 34, t. 1, f. 1.

Frond cylindrical, straight, rarely curved, smooth, elongate; no apparent constriction; not tapering at all towards the ends, which are more or less broadly rounded.

SIZE.  $76\text{-}104 \mu$  long  $\times 20\text{-}23 \mu$  broad.

Blubberhouses Moor.

### **Tetmemorus penioides**, *Bennett Journ. Micr. Soc.* 1886, p. 13, t. 2, f. 26.

Frond about the size of *T. granulatus*,  $190\mu$  long by  $47\cdot 5$  broad, linear elliptic, distinctly notched at each extremity, but without any lip-like process. Margin continuous, with scarcely any constriction. Cell wall not punctated or granulated.

Among *Sphagnum*. Furness Fells, Lancashire.

### **Micrasterias cornuta**, *Bennett Journ. Roy. Micr. Soc.* 1886, p. 7, t. 1, f. 6.

Frond oval, very large,  $0\cdot 355$  mm. in length,  $0\cdot 305$  mm. in breadth. The two terminal lobes urn-shaped, very light green, slightly projecting beyond the margin, and quite distinct for their whole length, reaching down to an oval quite colourless piece in the centre; ends of terminal lobes colourless, concave, not dentate or fimbriate. Each quarter with two deep and three less deep incisions. Margin  $27\cdot 5 \mu$  wide, perfectly colourless, consisting of six distinct pieces, each with a deep indentation.

Stream between Codale and Stickle Tarns, at an elevation of about 1,800 feet.

**Euastrum ornithocephalum**, Bennett Journ. Roy. Micr. Soc. 1886, p. 9, t. 1, f. 12.

Front minute,  $57 \mu$  long,  $30 \mu$  broad. Each frustule with a basal and central rounded lobe and a terminal lobe moderately deeply divided vertically, and with a single projecting tooth, the lobe resembling a bird's head. Sutural division somewhat shallow. Cell wall tuberculated.

Bog pool. Loughrigg.

Near *E. rostratum* and *E. pseudo-elegans*, Turn, but somewhat larger; the terminal lobe resembling that of *E. elegans*.

**Euastrum Lundellii**, Bennett Journ. Roy. Micr. Soc. 1886, p. 9, t. 1, f. 13. E. binale  $\gamma$  elobatum, Lund. Desm. Suec. p. 23, t. 2, f. 7.

Frond very minute,  $28 \mu$  long,  $14 \mu$  broad, truncately elliptical in outline. Frustule 3-lobed; terminal lobe truncate, gibbous, slightly concave, entire,  $11 \mu$  broad. Sutural constriction deep. Each frustule with a moderately conspicuous projection in the centre.

Among *Sphagnum*. Loughrigg.

**Cosmarium Wittrockii**, Lund. Desm. Suec. p. 31, t. 3, f. 14. Bennett Journ. Roy. Micr. Soc. 1886, t. 1, f. 15.

Frond very minute, shape of *C. margaritiferum*, but not crenulated, nearly circular in outline,  $25 \mu$  long,  $22.5 \mu$  broad; the two frustules slightly unequal; constriction deep; isthmus  $10 \mu$  broad. Cell wall not punctated, perfectly smooth.

In bog pools. Loughrigg.

**Cosmarium oblongum**, Bennett Journ. Roy. Micr. Soc. 1886, p. 10, t. 1 f. 16. Cosmarium sp., Reinsch. Contr. 82, t. 42, f. 3.

Frond minute,  $55 \mu$  long,  $22 \mu$  broad at its broadest part; each frustule elliptical, longer than broad, equally rounded at the base and the apex; isthmus  $11 \mu$  broad. Cell wall not punctated, perfectly smooth.

Bog pools. Loughrigg.

**Xanthidium spinulosum**, Bennett Journ. Roy. Micr. Soc. 1886, p. 11, t. 2, f. 17.

Frond moderately large, shape of *X. fasciculatum*; each frustule elliptical or slightly hexagonal,  $80 \mu$  long by  $40 \mu$  deep; isthmus  $60 \mu$ . Each frustule furnished with four pairs of geminate curved spines, about  $25 \mu$  long; the whole of the rest of the edge ciliated with closely-set spines or teeth, in one specimen about  $12 \mu$  long, in another specimen much shorter. Endochrome very granular, with a lighter, less granular portion in the centre of each frustule.

Stream between Codale and Stickle Tarns, at an elevation of about 1,800 feet.

**Staurastrum bullosum**, Bennett Journ. Roy. Micr. Soc. 1886, p. 11, t. 2, f. 18-20.

Frond moderately large; each frustule elliptical, more than twice as long as broad;  $85 \mu$  long,  $38 \mu$  wide, triangular in front view, united by a narrow isthmus,  $35 \mu$  wide. Each frustule with a hemispherical projection, which is very conspicuous, especially on

front view. Frond and projection uniformly verrucose. Both frond and projection fringed with colourless, equidistant, unbranched, subulate spines.

Amongst moss in stream flowing out of Loughrigg Tarn and elsewhere.

**Staurastrum tuberculatum**, Bennett *Journ. Roy. Micr. Soc.* 1886, p. 12, t. 2, f. 24.

Frond moderately large,  $70 \mu$  long by  $55 \mu$  broad; each frustule nearly hexagonal in shape,  $37 \mu$  broad at the apex,  $30 \mu$  at the isthmus; the terminal and upper lateral edges nearly straight or slightly convex, the lower lateral edges concave. The whole margin, except the lower lateral edges, rough with pearly granules, which are larger at the corners. Surface of frond tuberculated.

Bog pool. Loughrigg.

**Staurastrum quadri-spinatum**, Turner *Naturalist* 1886, p. 35, t. 1, f. 4.

Medium size, much longer than broad; frond smooth or lightly punctate; each angle of the segments bearing four stout divergent spines; ends of segments slightly concave; sinus wide, expanding rapidly.

SIZE.  $34 \mu$  long,  $26 \mu$  broad; isthmus  $8 \mu$ ; spines  $10 \mu$ .

Trelleck Common, Monmouth.

## BRITISH SPHÆROPSIDEÆ.

### PROVISIONAL LIST OF SPECIES HITHERTO FOUND IN THE BRITISH ISLANDS.

BY M. C. COOKE.

(Concluded from p. 108.)

#### MELANCONIEÆ, Berk.

Without perithecia, nestling beneath the cuticle through which the sporules partly issue in erumpent black or coloured masses or tendrils, sporules various, hyaline or coloured.

A. HYALOSPORÆ. Sporules hyaline.

GEN. 1. **GLOEOSPORIUM**, Desm. *Sacc. Syll.* III., 699.

Pustules subcuticular, disciform or pulvinate, at length often erumpent. Conidia ovate-oblong, continuous, hyaline, often oozing out in tendrils or globules.

A. On leaves of Dicotyledons.

606. **Gloesporium aquilegiæ**, Thüm. *Sacc. Syll.* 3660.

On *Aquilegia*. Kew.

607. **Gloesporium ficariæ**, Berk. *Sacc. Syll.* 3661.

On *Ficaria*. Forden.

608. **Gloëosporium berberidis**, Cke. Grev. XIII., 98.  
On *B. asiatica*. Kew.
609. **Gloëosporium concentricum** (Grev.), Sacc. Syll. 3665.  
On cabbage leaves. Edinbro'; Northamptonshire.
610. **Gloëosporium violæ**, B. & Br. Sacc. Syll. 3668.  
On *Viola odorata*. Glamis.
611. **Gloëosporium Hendersonii**, B. & Br. Sacc. Syll. 3673.  
On orange leaves. Milton.
612. **Gloëosporium cytisi**, B. & Br. Sacc. Syll. 3686.  
On laburnum leaves. Glamis.
613. **Gloëosporium fragariæ** (Lib.), Sacc. Syll. 3690.  
On strawberry leaves. Hampstead (F.B. I., 153); Twycross.
614. **Gloëosporium ribis** (Lib.), Sacc. Syll. 3694.  
On red currant leaves. Twycross; Neatishead (F.B. I., 151); Shrewsbury; Lancashire.
615. **Gloëosporium paradoxum**, De Not. Sacc. Syll. 3697.  
On ivy leaves. Twycross; Den of Airlie; Stratford-on-Avon.
616. **Gloëosporium nervisequum** (Fckl.), Sacc. Syll. 3716.  
On *Platanus*. Holm Lacey.
617. **Gloëosporium platani** (Mont.), Sacc. Syll. 3717.  
On *Platanus*.
618. **Gloëosporium tremulæ** (Lib.), Sacc. Syll. 3719.  
On aspen leaves.
619. **Gloëosporium carpini** (Lib.), Sacc. Syll. 3722.  
On *Carpinus*. Hampstead (F. B. I., 430).
620. **Gloëosporium fagi** (Desm.), Sacc. Syll. 3728.  
On beech leaves. Epping Forest.
621. **Gloëosporium umbrinellum**, B. & Br. Sacc. Syll. 3731.  
On oak leaves.

B. On fruits of Dicotyledons.

622. **Gloëosporium Lindemuthianum**, Sacc. Syll. 3747.  
On legumes. Sibbertoft, Suffolk.
623. **Gloëosporium fructigenum**, Berk. Sacc. Syll. 8751.  
On decaying pears. Woodnewton.
624. **Gloëosporium lacticolor**, Berk. Sacc. Syll. 3753.  
On peaches, melons, &c. King's Cliffe.
625. **Gloëosporium orbiculare**, Berk. Sacc. Syll. 3759.  
On gourds. King's Cliffe.

GEN. 2. **MYXOSPORIUM**, Link. Sacc. Syll. III., 722.

Pustules or nuclei nestling beneath the epidermis of trees, soft when moist, pallid or reddish, conidia ovoid, hyaline or pale.

626. **Myxosporium griseum** (Pers.), Sacc. Syll. 3793.  
On *Corylus*. Hatton.
627. **Myxosporium croceum** (Pers.), Sacc. Syll. 3804.  
On branches. Carlisle.

628. **Myxosporium dracænicolum**, B. & Br. *Sacc. Syll.* 3805.  
On *Dracæna*.

GEN. 3. **MYXORMIA**, B. & Br. *Sacc. Syll.* III., 734.

Pustules circumscribed by densely compacted threads, erumpent almost superficial, disciform or scutellate. Conidia oblong, connected by a narrow isthmus into a chain, hyaline.

629. **Myxormia atroviridis**, B. & Br. *Sacc. Syll.* 3837.  
On *Aira cæspitosa*. Batheaston.

GEN. 4. **BLOXAMIA**, B. & Br. *Sacc. Syll.* III., 734.

Pustules minute, almost superficial, truncate, firmer at the base, black, delicate at the apex and pale, and evanescent, hence excipuliform. Conidia catenulate, somewhat cubical, hyaline.

630. **Bloxamia truncata**, B. & Br. *Sacc. Syll.* 3839.  
On *Ulmus*. Batheaston.

GEN 5. **CYLINDROSPORIUM**, Ung. *Sacc. Syll.* III., 737.

Pustules or nuclei subepidermical, white or pallid, disciform or somewhat effused. Conidia filiform, continuous, hyaline, often flexuous.

631. **Cylindrosporium ficariæ**, Berk. *Sacc. Syll.* 3848.  
On *Ficaria*. Northamptonshire; Shrewsbury, Highgate (F. B. II., 172).  
632. **Cylindrosporium niveum**, B. & Br. *Sacc. Syll.* 3849.  
On *Caltha*. New Pitsligo.  
633. **Cylindrosporium ranunculi** (Bon.), *Sacc. Syll.* 3850.  
On *Ranunculus* and *Caltha*. Lyndhurst.  
634. **Cylindrosporium valerianæ**, Speg.  
On *V. officinalis*. Aberdeen.  
635. **Cylindrosporium rhabdosporum**, B. & Br. *Sacc. Syll.* 3860.  
On *Plantago*. Glamis.

GEN. 6. **CRYPTOSPORIUM**, Kunze. *Sacc. Syll.* III., 740.

Pustules or nuclei, discoid conical, covered by the epidermis, erumpent in the centre, sometimes included in a pseudo-peritheciun formed from the matrix. Conidia fusiform-falcate, rather large, continuous, hyaline.

636. **Cryptosporium Neesii**, Corda. *Sacc. Syll.* 3866.  
On alder branches. Easton; Blackheath.  
637. **Cryptosporium amygdalinum**, *Sacc. Syll.* 3872.  
On hornbeam twigs. Darenth.  
638. **Cryptosporium coronatum**, Fckl. *Sacc. Syll.* 3876.  
On poplar twigs. Highgate.  
639. **Cryptosporium hippocastani**, Cooke. *Grev. XIV.*, 4.  
On horse chestnut. Kew.

GEN. 7. **LIBERTELLA**, Desm. *Sacc. Syll.* III., 744.

Pustules or nuclei of variable form, long, covered by the epidermis, often at length erumpent in bright-coloured tendrils. Conidia filiform, bent, long, continuous, hyaline.

640. **Libertella faginea**, Desm. *Sacc. Syll.* 3892.  
On *Fagus sylvatica*. Abinger.

641. **Libertella roseæ**, Desm. *Sacc. Syll.* 3894.  
On rose twigs. King's Cliffe; Berwick; Kew.

642. **Libertella betulina**, Desm. *Sacc. Syll.* 3897.  
On birch bark. Glamis.

GEN. 8. **NÆMASPORA**, Pers. *Sacc. Syll.* III., 746.

Pustules or nuclei variable in form, long time covered by the epidermis, bright coloured, rather gelatinous. Conidia sausage-shaped, rather short, continuous, hyaline, often expelled in tendrils.

643. **Næmaspora microspora**, Desm. *Sacc. Syll.* 3910.  
On branches. Highgate; Mickleham.

GEN. 9. **MARSONIA**, Fisch. *Sacc. Syll.* III., 767.

Pustules always or for a long time covered by the cuticle, globose-discoid, pallid. Conidia ovoid or oblong, uniseptate, hyaline.

644. **Marsonia populi** (*Lib.*), *Sacc. Syll.* 4024.  
On poplar leaves. Rushton.

645. **Marsonia juglandis** (*Lib.*), *Sacc. Syll.* 4028.  
On walnut leaves. Neatishead; Fern.

646. **Marsonia potentillæ** (*Desm.*), *Sacc. Syll.* 4037.  
On *Potentilla* leaves.

## B. PHÆOSPORÆ. Sporules coloured.

GEN. 10. **MELANCONIUM**, Link. *Sacc. Syll.* III., 749.

Pustules or nuclei subcutaneous, conical or disciform, black. Conidia acrogenous, globose then oblong, continuous, sooty brown, at length erumpent in black masses or tendrils, staining the matrix.

647. **Melanconium magnum** (*Grev.*), *Sacc. Syll.*, 3946.  
On walnut branches. Gopsall.

648. **Melanconium elevatum**, Corda. *Sacc. Syll.* 3950.  
On oak branches. Langridge.

649. **Melanconium sphæroideum**, Link. *Sacc. Syll.* 3959.  
On alder. Kew; Forden.

650. **Melanconium bicolor**, Nees. *Sacc. Syll.* 3963.  
On bark of *Betula*, *Carpinus*, *Quercus*. Hermitage; Kew; Thorney; Hampstead.

651. **Melanconium betulinum**, Sch. & K. *Sacc. Syll.* 3955.  
On bark of *Betula alba*. Twycross.

652. **Melanconium sphærospermum** (*Pers.*), *Sacc. Syll.* 3989.  
On reeds. Tansor.

GEN. 11. **CRYPTOMELA**, *Sacc. Syll. III.*, 760.

Pustules or nuclei subcutaneous or at length erumpent, black, minute. Conidia fusoid, often curved, black.

653. **Cryptomela caricis** (*Corda*), *Sacc. Syll.* 3992  
On *Carices*. Orton; Spyre Park.

GEN. 12. **CHEIROSPORA**, *Fr.* (*Thysidium, Mont.*), *Sacc. Syll. III.*, 761.

Stroma gelatinous, subcortical, covered by the epidermis, at length by its rupture erumpent, inky black, basidia branched, hyaline, radiating. Conidia globose, concatenate, dingy olive, agglomerated in terminal subglobose heads.

654. **Cheirospora hedericola** (*Not.*), *Sacc. Syll.* 3998.  
On ivy. Highgate; Kew; King's Lynn; Eastbourne.  
655. **Cheirospora botryospora**, *Fr.* *Sacc. Syll.* 3999.  
On beech. Bristol; Batheaston; Weybridge.

GEN. 13. **DIDYMOSENIA**, *Nees.* *Sacc. Syll. III.*, 763.

Pustules globose or oblong, soon erumpent. Conidia oblong or fusoid, uniseptate, brown or sooty, often shortly stipitate.

656. **Didymosporium profusum**, *Grev.* *Sacc. Syll.* 4009.  
On *Fagus* and *Acer*. Scotland.  
(We have never yet seen septate conidia in original specimens.)

GEN. 14. **STILBOSPORA** (*Pers.*), *Sacc. Syll. III.*, 771.

Pustules subcutaneous, conoid or disciform, black. Conidia oblong or fusoid, 2 or many septate, sooty brown, at length expelled in tendrils.

657. **Stilbospora thelebola**, *Sacc. Syll.* 4042.  
On *Alnus*.  
658. **Stilbospora angustata**, *Pers.* *Sacc. Syll.* 4045.  
On *Carpinus*. Northamptonshire.  
659. **Stilbospora macrosperma**, *Pers.* *Sacc. Syll.* 4046.  
On oak branches. Thringstone; Berg Holt; Appin; Elms-  
stead.

GEN. 15. **CORYNEUM**, *Nees.* *Sacc. Syll. III.*, 774.

Pustules disciform or pulvinate, subcutaneous then erumpent, black, compact. Conidia oblong or fusoid, 2 or many septate, sooty brown, never expelled in tendrils.

- [**Coryneum Beyerinckii**, *Oud?*]  
660. **Coryneum microstictum**, *B. & Br.* *Sacc. Syll.* 4059.  
On *Rosa*, *Rubus*, &c. Bristol; Batheaston; Glamis.  
661. **Coryneum cistinum**, *Cooke.* *Grev. XIV.*, 5.  
On *Cistus laurifolius*. Kew.  
662. **Coryneum macrospermum**, *B. & Br.* *Sacc. Syll.* 4066.  
On *Alnus*.  
663. **Coryneum compactum**, *B. & Br.* *Sacc. Syll.* 4068.  
On *Ulmus*. Wraxall.  
664. **Coryneum umbonatum**, *Nees.* *Sacc. Syll.* 4070.  
On *Ulmus* and *Quercus*. Kew.

665. **Coryneum pulvinatum**, Kunze. *Sacc. Syll.* 4071.  
On *Tilia*, &c. Twycross; Burleigh Park.
666. **Coryneum Kunzei**, Corda. *Sacc. Syll.* 4074.  
On *Quercus*. Rudloe; Ross; Penzance; Blackheath; Chislehurst.  
var. **Salicis**.  
On *Salix Smithiana*. Kew.
667. **Coryneum disciforme**, Kunze. *Sacc. Syll.* 4075.  
On *Tilia*, *Quercus*, and *Betula*. Wiltshire; Highgate.
668. **Coryneum Notarisianum**, Sacc. *Syll.* 4076.  
On *Betula papyrifera*. Kew.

**GEN. 16. SCOLECOSPORIUM**, Lib. *Sacc. Syll.* III., 782.

Pustules subcutaneous, then erumpent, pulvinate, compact, black. Conidia fusoid, sooty brown, many septate, attenuated at the apex into a curved pale beak.

669. **Scolecosporium fagi**, Lib. *Sacc. Syll.* 4094.  
On *Fagus*. Northamptonshire; North Wootton; Weybridge.

**GEN. 17. ASTEROSPORIUM**, Kunze. *Sacc. Syll.* III., 782.

Pustules pulvinate, erumpent, black. Conidia stellately lobed, brown, lobes attenuated outwards, many septate.

670. **Asterosporium Hoffmanni**, Kunze. *Sacc. Syll.* 4095.  
On *Fagus*, *Betula*, &c. Highgate; King's Cliffe; Wansford; Kew; Weybridge; Abinger; Shere.

**GEN 18. PESTALOZZIA**, DeNot. *Sacc. Syll.* III., 784.

Pustules subcutaneous, afterwards erumpent, disciform or pulvinate, black. Conidia oblong, 2 or many septate, coloured, very rarely hyaline, apex hyaline, bearing one or many cilia. Basidia hyaline.

671. **Pestalozzia funerea**, Desm. *Sacc. Syll.* 4135.  
On *Coniferæ*, &c. Hatton; Stratford-on-Avon.
672. **Pestalozzia Guepini**, Desm. *Sacc. Syll.* 4146.  
On *Camellia* and *Rhododendron*. Kew; Milton; Forden; Rugby.
673. **Pestalozzia lignicola**, Cooke. *Sacc. Syll.* 4147.  
On chips.

**GEN. 19. STEGANOSPORIUM**, Corda. *Sacc. Syll.* III., 803.

Pustules subcutaneous, at length erumpent, black, pulvinate, compact. Conidia solitary (not concatenate), ovoid or pear-shaped, 2 or many septate, and muriform.

674. **Steganosporium pyriforme** (Hoffm.), Sacc. *Syll.* 4195.  
On bark. King's Cliffe; Twycross; Jedburgh; Coed Coch; Oundle.
675. **Steganosporium cellulosum**, Corda. *Sacc. Syll.* 4200.  
On bark of *Tilia*. Weybridge; Forden; Kew.

## SOME EXOTIC FUNGI.

(Continued from p. 90.)

**Agaricus (Naucoria) acutus, Cooke.**

Pileo carnoso, conico-campanulato, acuto umbonato, glabro, lăevi, opaco, ochraceo (3-5 mm. lat.); stipite gracili, fistuloso (1 unc. long,  $\frac{1}{2}$  mm. crass.), adpresso fibrilloso, æquali, albido-flavescente; lamellis adnatis, subconfertis, lutescenti-cinnamomeis, acie pallidiore.

On rotten logs. New Zealand (*Colenso* 48, 88).

Allied to *Agaricus camerinii* and *Ag. triscopus*.

**Hydnus (Resupinatum) tabacinum, Cooke.**

Subculo effuso, adnato, tomentoso, subferrugineo; aculeis subconfertis, crassinsculis, rigidis, conicis, acutis, farinaceo-pulverulentibus, concoloribus.

On rotten logs. New Zealand (*Colenso* 150).

Allied to *H. Weinmanni* and *H. ferruginosum*, but with stouter and more rigid teeth. The subiculum fibrous, somewhat woolly at the margin.

**Cyphella filicola, Cooke.**

Albida; cupulis subdiscoideis, concavis (1 mm. lat.) lăevibus, glabris, subtus marginali affixis, latero altero incurvis, margine integro, vel bicuspidato; sporis ellipticis, hyalinis ( $0\cdot12 \times 0\cdot04$  mm.).

On fronds of *Hymenophyllum*. New Zealand (*Dr. Ralph*). Napier, New Zealand (*Colenso* 80).

On *Adiantum*. Walhalla, Gipps Land (*Tisdale* 28).

**Coleosporium Fuchsiae, Cooke.**

Epiphyllum. Maculis parvulis, ochraceo-fuscis, angulatis vel confluentibus; soris gregariis, erumpentibus, demum epidermide ruptâ cinctis. Conidiis ovalibus ( $30\text{-}40 \times 20\text{-}22 \mu$ ) verrucosis, aurantio-fuscis.

On living leaves of *Fuchsia excorticata*. New Zealand (*Kirk* 268).

**Septoria coprosmae, Cooke.**

Maculis orbicularibus, minutis, pallidis, nigro-limitatis; peritheciis paucis, semi-immersis, atris, pertusis; sporulis cylindraceis, flexuosis, obsolete guttulatis, hyalinis ( $30 \times 2 \mu$ ).

On fading and dead leaves of *Coprosma*. New Zealand (*Colenso* 336).

**Leptothyrium panacis, Cooke.**

Peritheciis gregariis, vel sparsis, punctiformibus, scutiformibus, membranaceis, orbicularibus, atro-fuscis. Sporulis minutis, cylindraceis, rectis vel leniter curvulis, hyalinis ( $7 \times 2 \mu$ ).

On upper face of fading leaves of *Panax arboreum*. New Zealand (*Colenso* 341).

Chiefly on the midrib and principal veins.

**Cylindrosporium nanum, Cooke.**

Hypophyllum. Maculis angulatis, nervulis limitatis, canescentibus, acervulis minutis, albidis, conidiis, cylindraceis, rectis, hyalinis, denique emergenti-superficialibus ( $8-10 \times 1 \mu$ ).

On living leaves of *Juglans*. New Zealand (Kirk 254).

Allied to *C. microspermum*, Speg.

**Ovularia malorum, Cooke.**

Hypophylla. Maculis effusis, confluentibus, albidis, subfarnesis, hyphis brevibus, conidiis ellipticis, hyalinis ( $10-12 \times 4-5 \mu$ ).

On living leaves, petioles, &c., principally young shoots of apple. New Zealand (Kirk 271, 272).

**Sphaerella Weinmanniae, Cooke.**

Epiphylla. Peritheciis gregariis, subglobosis, atris, semi-immersis, punctiformibus, pertusis. Ascis clavatis. Sporidiis lanceolatis, uniseptatis ( $0.15-0.18 \times 0.04$  mm.) hyalino-luteolis.

On dead leaves of *Weinmannia racemosa*. New Zealand (Colenso 215).

**Asterina reptans, B. & C.**

Stylospores ; cylindrical, slightly curved, almost linear ( $10 \times 1 \mu$ ), hyaline.

This condition would fall into the *Leptostromaceæ* perhaps as a species of *Leptothyrium* rather than *Melasmia*, to either of which it is allied.

Common on various coriaceous leaves, such as *Panax*, *Knightia*, &c. New Zealand (Colenso).

## SACCARDO, SYLLOGE FUNGORUM, VOL. IV.

The fourth volume of Professor Saccardo's book has just come to hand, including the Hyphomycetes. Undoubtedly this was the most critical and difficult of any of the sections with which our author has been called upon to deal, and we venture to think that, on the whole, he has achieved as much success as he could have hoped for. Only by practical test of experience will its real value be determined.

This volume enumerates 3,583 species, which are classed under four families—1, *Mucedineæ*, or the white moulds ; 2, *Dematiæ*, the black moulds ; 3, *Stilbeæ*, of which the old genus *Stilbum* is the type ; and, 4, *Tuberculariæ*, including such verruciform genera as *Tubercularia*. This arrangement, so far, indicates no new departure, and, we think, will commend itself as the best course which could have been adopted.

It would be manifestly unjust to venture any observations of a critical nature upon a work which has been before us but

a few hours. It may be that, upon closer acquaintance with the details, we may be able to trace species of which we find at present no indication in the "Index." Under any circumstances this has been a weakness in the work, that the Index is very far from perfect, and we fear, from one or two trials, that where former volumes were weak the present is not strong. Nevertheless, although it is quite possible that in some instances we shall not feel disposed entirely to agree with Professor Saccardo when we come to use the book for working purposes, we take no exception to the arrangement he has adopted, or the general manner in which he has carried it out, unless it be here and there a suspicion of more genera than seem to be necessary.

A singular typographical error in the heading of the pages, commencing at page 239 and continued for fifty pages, is very misleading, and should have been avoided in a work of this kind, where so much depends on ready reference.

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### COOKE'S HERBARIUM OF FUNGI.

The whole of M. C. Cooke's extensive Herbarium of Fungi has been acquired for the nation, and has been transferred to the Herbarium of the Royal Gardens at Kew, where it is in close proximity to the Herbarium of the Rev. M. J. Berkeley, which it even exceeds in numerical extent. It will be a source of gratification to mycologists that these two, the largest and most complete collections of Fungi ever made in this country, should have become public property, and may hereafter be consulted by Botanists from all parts of the world. The Herbarium of the Rev. M. J. Berkeley will be maintained distinct, but the other is in course of incorporation with the General Herbarium of Fungi.

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### FIGURES OF CORTINARII.

A good opportunity now presents itself for mycologists who are specially interested in the species of the large and difficult genus *Cortinarius*, to commence taking the "Illustrations of British Fungi" from part \*42 onwards, by which means they will obtain figures of *Coprinus* and *Cortinarius*. Those for whom the entire work may appear too extensive and expensive, may obtain this portion, which will not exceed a single volume, and thus far it will be complete in itself, although the plates are numbered consecutively in continuation from the earlier portion of the work. Good figures are indispensable for the successful study of the species of this large genus, which will commence with part 44, as *Coprinus* commences with part 42, and occupies two parts.

## NEW BRITISH FUNGI.

(Continued from p. 90.)

**Haplographium bicolor**, Grove Sci. Goss., Sept. 1885, figs. 127, 128.

Stems effused, gregarious, occasionally two or three connate at the base, erect, straight,  $\frac{1}{5}$ - $\frac{1}{3}$  mm. high, rigid, blackish-brown, opaque, paler and rounded above, bulbous below; head pale, honey-coloured, obovate, the lower part composed of dense persistent radiating, twice penicillately branched threads; spores, oblong or ovate, hyaline, subacute ( $4\text{-}5 \mu$  long).

On rotting wood. Birmingham. (W. B. Grove.)

**Saccharomyces glutinis** (Fries). Cohn. Beitr. I., 187.

Cells round, oval, oblong, elliptic, to shortly cylindrical,  $5\text{-}11 \mu$  long, about  $4 \mu$  broad, isolated or united in twos, seldom more together. Cell membrane and contents colourless when fresh, but when moistened again after drying with a faintly reddish central nucleus.—Grove Synopsis, p. 63, fig. 66.

On leaves, petioles, and bulbs of *Eucharis*, Sutton Coldfield (W. B. G.). On *Eucharis subedentata* and *Hymenocallis adnata*. Kew Gardens.

**Ovularia Doronici**, Sacc. Mich. II., 638.

Hypophylloous, somewhat effused, whitish. Threads rather fasciculate, erect,  $30\text{-}40 \times 3$ , continuous, hyaline, shortly branched above or denticulate; conidia oblong or subfusoid (? cylindrical), often catenulate, rather acute at each extremity,  $12\text{-}15 \times 4\text{-}5$ , hyaline.

On living leaves of *Doronicum*. Forres. (Rev. J. Keith.)

The Scotch specimens differ in the conidia, being more accurately described as cylindrical and narrower.  $12\text{-}15 \times 2\text{-}3 \mu$ .

**Septoria adoxæ**, Fckl. Symb. App. II., 21.

Perithecia, scattered or subgregarious, sometimes seated on bleached spots, at length free, black, obtusely conical, flattened at the base, minute; ostiolum obtuse, perforate; sporules cylindrical, often straight, 2-3 celled, hyaline,  $32\text{-}36 \times 4 \mu$ , hyaline.—Sacc. Syll. III., 543, No. 2945.

On leaves of *Adoxa*. Forres. (Rev. J. Keith.)

**Ramularia adoxæ**, (Rabh.), Sacc. Syll. IV., 206.

Tufts on the under surface, punctiform and confluent, whitish or hoary, threads simple, slightly denticulate,  $45\text{-}60 \times 3\text{-}4 \mu$ , hyaline, conidia cylindrical, rod-shaped or elongated, fusiform, simple (? one to three septate),  $15\text{-}33 \times 4\text{-}6 \mu$ . *Fusidium adoxæ*, Rabh. in Herb. Myc. II., No. 598.

On living leaves of *Adoxa*. Forres. (Rev. J. Keith.)

This can hardly be different from *Ramularia adoxæ*, Sacc. Syll. IV., 206, which is said to have simple conidia, whereas in our specimens they are 1-3 septate.

- Oospora rosella**, *Grove Journ. Bot.*, 1885, 163.  
On horse dung. Edgbaston.
- Oospora candidula**, *Sacc. Fungi Ital.*, 1880. *Grove Journ. Bot.*, 1885, 163.  
On *Tubercularia vulgaris*, &c. Sutton.
- Oospora fusca**, *Grove Journ. Bot.*, 1885, 163.  
On *Bulgaria inquinans*. Sutton.
- Fusidium viride**, *Grove Journ. Bot.*, 1885, 164.  
On dead stems of *Heracleum*. Bradnock's Marsh.
- Cephalosporium acremonium**, *Corda Ic. III.*, t. 2, f. 29. *Grove Journ. Bot.*, 1885, 164.  
On stems of *Rubus*, *Heracleum*, and on rotting wood.
- Aspergillus spiralis**, *Grove Journ. Bot.*, 1885, 164.  
On phial cork. Birmingham.
- Gliocladium penicilloides**, *Corda Ic. IV.*, f. 92. *Grove Journ. Bot.*, 1885, 164.  
On hymenium of old *Stereum*. Trickley coppice.
- Spicaria elegans**, *Harz. Hypo.*, 51. *Grove Journ. Bot.*, 1885, 165.  
On dead moss and rotting wood. Sutton.
- Dactylella rhombospora**, *Grove Journ. Bot.*, 1885, 166, t. 257, f. 4.  
On rotten wood. Selly Oak.
- Hyalopus ater**, *Corda Ic. IV.*, 89. *Grove Journ. Bot.*, 1885, 166.  
On decayed wood. Sutton.
- Haplographium bicolor**, *Grove Journ. Bot.*, 1885, 167.  
On rotten wood. New Park, Middleton.
- Chalara longissima**, *Grove Journ. Bot.*, 1885, 167, t. 257, f. 8.  
On rotten wood. Trickley Coppice.
- Diplococcum spicatum**, *Grove Journ. Bot.*, 1885, 167, t. 257, f. 7.  
On rotten wood. Sutton.
- Helminthosporium cylindricum**, *Corda in Sturm. XI.*, t. 11. *Grove Journ. Bot.*, 1885, 168.  
On dead wood. Twycross (Bloxam), Witton. (W. B. G.)
- Helminthosporium inconspicuum**, *C. & E. Grev. VI.*, 88, t. 99, f. 19.  
var. *Britannicum*. *Grove Journ. Bot.*, 1885, 168.  
On grasses. Salford Priors.
- Acrothecium tenebrosum**, *Sacc. Mich. I.*, 74. *Grove. Journ. Bot.*, 1885, 168.  
On dead wood. Kenilworth, Sutton.
- Pachnocybe clavulata**, *Grove Journ. Bot.*, 1885, 168, t. 256, f. 10.  
On rotten wood. Hampton in Arden.
- Epicoccum granulatum**, *Penz. F. Agr.* *Grove Journ. Bot.*, 1885, 169.  
On culms and sheaths of *Dactylis*. Three Shire Oak.

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WOOLHOPE CLUB FORAY.—The annual Foray is fixed this year to take place at Hereford, on Thursday, October 7th.

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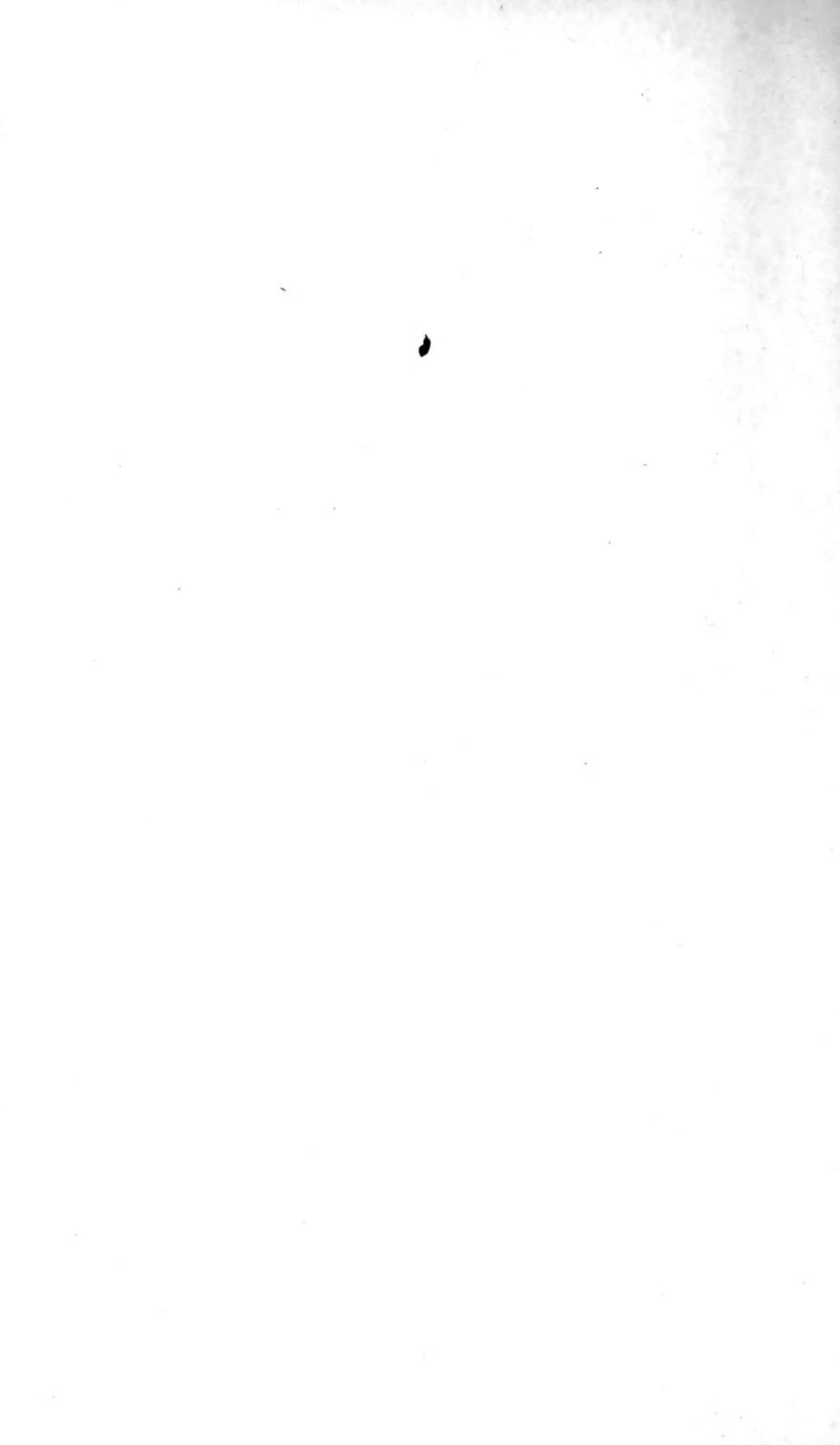
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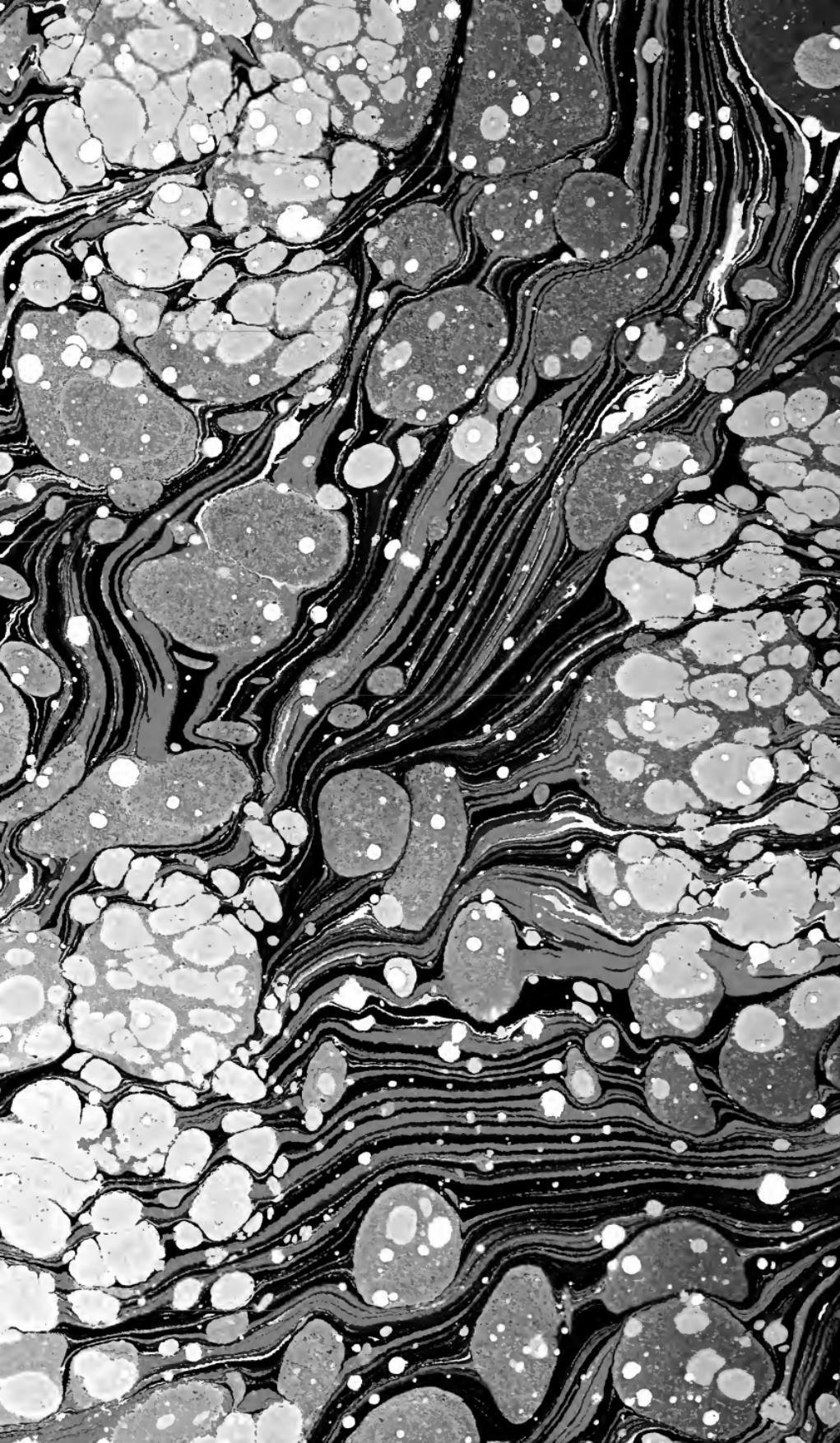
APPENDIX, containing revised diagnoses of the Hymenomycetes in " Cooke's Handbook" to accompany the " Illustrations" paged separately, in continuation, pp. 113 to 144.

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